



THE UNIVERSITY *of* EDINBURGH

This thesis has been submitted in fulfilment of the requirements for a postgraduate degree (e.g. PhD, MPhil, DClinPsychol) at the University of Edinburgh. Please note the following terms and conditions of use:

This work is protected by copyright and other intellectual property rights, which are retained by the thesis author, unless otherwise stated.

A copy can be downloaded for personal non-commercial research or study, without prior permission or charge.

This thesis cannot be reproduced or quoted extensively from without first obtaining permission in writing from the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

**An exploration of the relationship between maternal childhood
emotional abuse/neglect and parenting outcomes: A systematic review
and empirical analysis.**

Mary Hughes



Doctorate in Clinical Psychology (DClinPsychol)
University of Edinburgh
May 2014

D. Clin. Psychol. Declaration of own work

Name: Mary Hughes

Assessed work: Thesis

Title of work: An exploration of the relationship between maternal childhood emotional abuse and/or emotional neglect and parenting outcomes: A systematic review and empirical analysis.

I confirm that all this work is my own except where indicated, and that I have:

- Read and understood the Plagiarism Rules and Regulations
- Composed and undertaken the work myself
- Clearly referenced/listed all sources as appropriate
- Referenced and put in inverted commas any quoted text of more than three words (from books, web, etc)
- Given the sources of all pictures, data etc. that are not my own
- Not made undue use of essay(s) of any other student(s) either past or present (or where used, this has been referenced appropriately)
- Not sought or used the help of any external professional agencies for the work (or where used, this has been referenced appropriately)
- Not submitted the work for any other degree or professional qualification except as specified
- Acknowledged in appropriate places any help that I have received from others (e.g. fellow students, technicians, statisticians, external sources)
- Complied with other plagiarism criteria specified in the Programme Handbook
- I understand that any false claim for this work will be penalised in accordance with the University regulations
- (For R2 &Thesis) Received ethical approval from the University of Edinburgh, School of Health

Signature

Date

27/04/14

Acknowledgements

I am indebted to all of the mothers who took part in this study and to all of the schools who participated in this research.

My gratitude goes also to Dr Jill Cossar for her insightful comments and recommendations and for making my journey through this process easier. Thanks are also expressed to Dr Allyson Turnbull for her advice and support. I would also like to express my gratitude to Dr Nuno Ferreira and Dr Melanie Platten for their guidance on statistics.

I would also like to say thank you to my family for their support, as always, and for their help with the onerous task of preparing thousands of invitation letters! Finally, a special thanks to Stuart for all his help and encouragement, and for being there.



Table of Contents

Declaration of own work.....	i
Acknowledgements.....	ii
Table of Contents.....	iii
Table of Figures.....	v
Table of Tables	vi
Abstract of Portfolio.....	vii

Systematic Review

Abstract	1
Key Practitioner message:.....	2
Introduction	3
Method	6
Results	9
Discussion	29
Conclusions	37
References	38

Empirical paper

Abstract	45
Introduction	46
Method	53
Results	60
Discussion	69
Conclusions	77

References	78
Additional Methodology	88
References for complete portfolio.....	89
Appendix 1: Quality Criteria.....	103
Appendix 2: Overview of full-text articles reviewed but not retained for review ...	105
Appendix 3: Author guidelines, Child Abuse Review.	108
Appendix 4: Participant Information Sheet	113
Appendix 5: Consent Form	115
Appendix 6: Guide to taking part.....	116
Appendix 7: Demographic Information Questionnaire.....	117
Appendix 8: Ethical approval from the Clinical Psychology Research Ethics panel	118
Appendix 9: Confirmation of approval in relation to project amendment.....	119
Appendix 10: Confirmation of approval, Renfrewshire Council.....	120
Appendix 11: Confirmation of approval, Stirling Council.....	121
Appendix 12: Confirmation of approval, East Dunbartonshire Council	122
Appendix 13: Confirmation of approval, East Renfrewshire Council.....	123
Appendix 14: Confirmation of approval, Midlothian Council.....	124
Appendix 15: Author guidelines, Journal of Family Psychology	125

Total word count: 13,964 (not including references and appendices).

Table of Figures

Figure 1: Prisma (2009) flow diagram outlining the search strategy	9
Figure 2. Multiple mediation model with CEA as the predictor variable	65
Figure 3: Multiple mediation model with CEN as the predictor variable	66

Table of Tables

Table 1: Overview of Quality Rating, Demographic Information and Study Variables of included studies.....	13
Table 2: Overview of study aims, results and statistical analysis.....	18
Table 3: Quality assessment of each study reviewed	23
Table 4: Description of EMSs within the disconnection/rejection domain (Young et al. 2003).....	49
Table 5: Number and percentage (%) of participants within each CTQ severity category	60
Table 6: Bivariate correlations among CEA, CEN, EMSs, maternal PCF and BDI score	62
Table 7: Effects within 'a paths', 'b paths', direct effects, indirect effects and BC CI's in the CEA model	67
Table 8: Effects within 'a paths' and 'b paths', direct effects, indirect effects and BC CI's in the CEN model	68

Abstract of Portfolio

This study investigated the relationship between maternal childhood experience of emotional abuse (CEA) and/or emotional neglect (CEN) and subsequent second-generation parenting outcomes. A systematic review of the literature was carried out, with twelve studies included for review. Evidence was found of a relationship between maternal experience of CEA/CEN and a negative impact on the subsequent parent-child relationship and parenting behaviours; including greater dysfunctional parent-child interactions, lower empathy, greater psychological control, greater child maltreatment potential and punitiveness. Evidence in relation to the impact on parenting competence was less robust. For practitioners, these findings highlight the importance of considering maternal childhood experiences when working with parents and when attempting to make sense of children's difficulties. Methodological weaknesses were highlighted and recommendations for future research made.

Secondly, a cross-sectional study was carried out which explored whether early maladaptive schemas (EMSs) mediated the relationship between maternal CEA/CEN and attributions of perceived control over failure (PCF) in child care-giving interactions. Mothers (N=111) completed five self-report questionnaires in relation to the above. Multiple mediation analyses using bias corrected bootstrapping were carried out. In line with expectations, significant relationships were found between both CEA and CEN and EMSs. CEN also demonstrated both a direct and indirect effect on PCF score, via the EMSs Social Isolation/Alienation. However, the indirect effect was in the opposite direction to that predicted. No other indirect effects were found. CEA demonstrated neither a direct effect on PCF, nor an indirect effect via any of the EMSs. Results are discussed in the context of current research.

The relationship between maternal childhood emotional abuse/neglect and second generation parenting outcomes: A Systematic Review.

Abstract

This paper reviews the evidence concerning the association between maternal childhood experience of emotional abuse and/or neglect and subsequent parenting behaviours, beliefs and attitudes. Relevant studies were identified through a systematic review of four electronic databases using a pre-determined keyword search. Reference lists of key papers were reviewed and key authors in the field contacted to ascertain whether other papers were available. Twelve studies which met our eligibility criteria were included for review. Tentative support was found for a relationship between maternal childhood emotionally abusive/neglectful experiences and a range of adverse parenting outcomes, including increased stress and maltreatment potential, lower empathy and greater psychological control. However, limitations within the research (e.g. small sample size, retrospective designs) reduce the confidence with which we can draw firm conclusions. Recommendations are offered for future research together with an outline of clinical implications arising from this review.

Key Practitioner message:

- Maternal childhood experience of emotional abuse/neglect is associated with subsequent deficits in second-generation parenting (e.g. decreased sensitivity and dysfunctional interactions), and increased maternal stress and maltreatment potential towards offspring.
- Maternal childhood experiences of being parented should be considered when attempting to make sense of children's difficulties and/or problems in the parent-child relationship.
- Further research is required to explore these relationships and to build on our knowledge about contextual risk and protective factors.

Key words: Emotional abuse, Emotional neglect, Parenting, Systematic Review.

Introduction

Abusive and neglectful childhood experiences have been demonstrated to impact negatively at both the individual level, in terms of psychological, health and behavioural outcomes, and the interpersonal level, through impairment in relationships (Bailey *et al.* 2012). Within this context, the impact on survivors' subsequent parenting behaviours has received considerable attention due to the propensity for negative outcomes to impact on future generations. There is a general consensus that child maltreatment, particularly physical and sexual abuse, may lead to an increased risk of the intergenerational transmission of negative or abusive parenting behaviours (e.g. Egeland, 1993; Oliver, 1993).

The impact of exposure to childhood emotional abuse and neglect

The focus on outcomes of abusive and neglectful behaviours has, in recent years, widened to incorporate experiences of psychological maltreatment. This is particularly significant given the growing recognition that this form of maltreatment appears to underpin all others (Barlow and Schrader-Macmillan, 2009; Hart and Glaser, 2011). Emotional abuse and emotional neglect can be experienced independently, but also commonly co-occur with other forms of maltreatment (Claussen and Crittenden, 1991). They are therefore likely to be the most common form of maltreatment experienced by children. (see Baker and Maiorino, 2010).

High prevalence rates of emotional maltreatment are concerning given increasing evidence that it is the psychological component of abusive and neglectful behaviours which may have the most detrimental consequences on subsequent

functioning (Kaplan *et al.*, 1999; Vissing *et al.*, 1991). A review of recent research (see Kaplan *et al.* 1999), examining outcomes of emotional abuse, found that, compared with physical abuse, emotional abuse was a stronger predictor of a wide range of subsequent difficulties, including internalising and externalising problems, adult interpersonal conflict and suicidality (Briere and Runtz, 1988, 1990; Kaplan *et al.*, 1999; Mullen *et al.*, 1996). Briere and Runtz (1990) also found a unique relationship between childhood experience of emotional abuse and low self-esteem, suggesting that aspects of the way in which children are perceived and related to may become internalised to produce a negative self-concept.

Defining and recognising emotional abuse and neglect

Accumulating evidence highlighting both the impact and frequency of these forms of maltreatment has led to an increased drive to promote clarity around definitions of emotional abuse and neglect. Historically, detection of, and intervention with, these forms of maltreatment have been hampered by difficulties in defining concepts and establishing the thresholds for emotionally abusive/neglectful behaviours (Glaser, 2002; Wright, 2007). Glaser (2011) has sought to increase clarity in this area through her proposal of a definition of emotional abuse and neglect as “persistent, non-physical, harmful interactions with the child by the caregiver, which include both omission and commission” (p. 869). A theoretically driven conceptual framework has also been outlined to describe the different forms of harmful caregiver-child interactions (see Glaser, 2011).

These developments are of particular importance given the insights which

attachment theory and social learning models have provided into the potential consequences of childhood exposure to emotional abuse and neglect on the quality of subsequent generation parent-child relationships. Cichetti and Toth (2005) have emphasised the fundamental association between the early child and caregiver relationship, the quality of the attachment bond, and the subsequent internalisation of relational experiences in the formation of internal working models. Early experiences which are emotionally abusive or neglectful are therefore likely to lead to negative internal representations of the self and others (Riggs, 2010). These may then confer a negative impact on the quality and nature of interpersonal relationships and experiences, including future parenting.

We may hypothesise, therefore, that mothers who were exposed to early relationships which were hostile, denigrating, inconsistent, or which failed to acknowledge and celebrate their individuality, may demonstrate deficits in their parenting.

Objective of review

This paper aims to contribute to both the child maltreatment and parenting literatures by reviewing the relationship between mothers' emotionally abusive and emotionally neglectful experiences in childhood, and subsequent parenting outcomes.

Method

Inclusion and Exclusion criteria

This systematic review included both retrospective and prospective cohort, cross-sectional and case-control studies which met the following inclusion criteria: (1) the study explored the intergenerational relationship between maternal emotionally abusive or neglectful childhood experiences and subsequent parenting behaviours, beliefs or attitudes; (2) the study was English language, and; (3) the study was published in a peer reviewed journal. Studies were excluded which: (1) reported exposure to combined types of abuse only; (2) used a qualitative methodology; (3) were unpublished dissertations; (4) were single-case studies, or; (5) were conference abstracts.

Search Strategy

Given the scarcity of studies examining the intergenerational impact of childhood experience of emotional abuse and emotional neglect, we undertook a review which was designed to be as comprehensive as possible. We therefore allowed for variability across studies in a variety of ways. Firstly, in terms of the way in which emotionally abusive and neglectful childhood experiences were conceptualised and measured; secondly in terms of the subsequent parenting behaviours and attitudes measured within each study, and; thirdly in terms of variability between participants recruited to studies (including studies examining maternal representations in expectant mothers).

Four electronic databases (Psych Info, EMBASE, Medline and Sociological

Abstracts) were searched up to 7th November 2013. The thesaurus function was used to determine subject headings or descriptors which were specific to each database.

Keyword searches were carried out using the terms:

“child abuse*” or “emotional abuse*” or “psychological abuse” or “mental abuse” or “verbal abuse*” or “child neglect*” or “emotional neglect” or “psychological neglect” AND “mother child relations*” or “parent child relations*” or “parenting*” or “parenting skills*” or “parenting style*” or “early experience*” or “transgenerational patterns*”

An initial review of the titles and/or abstracts of papers identified those that failed to meet inclusion criteria or which met exclusion criteria (see Fig 1). These papers were therefore excluded. Articles which appeared to meet the inclusion criteria were retrieved in full-text for closer inspection and included where these criteria were deemed to have been met. The reference lists of selected papers were hand-searched to identify any other relevant studies. Finally, key authors were contacted to ascertain whether any further applicable studies were currently in press. No further papers were identified.

Quality assessment

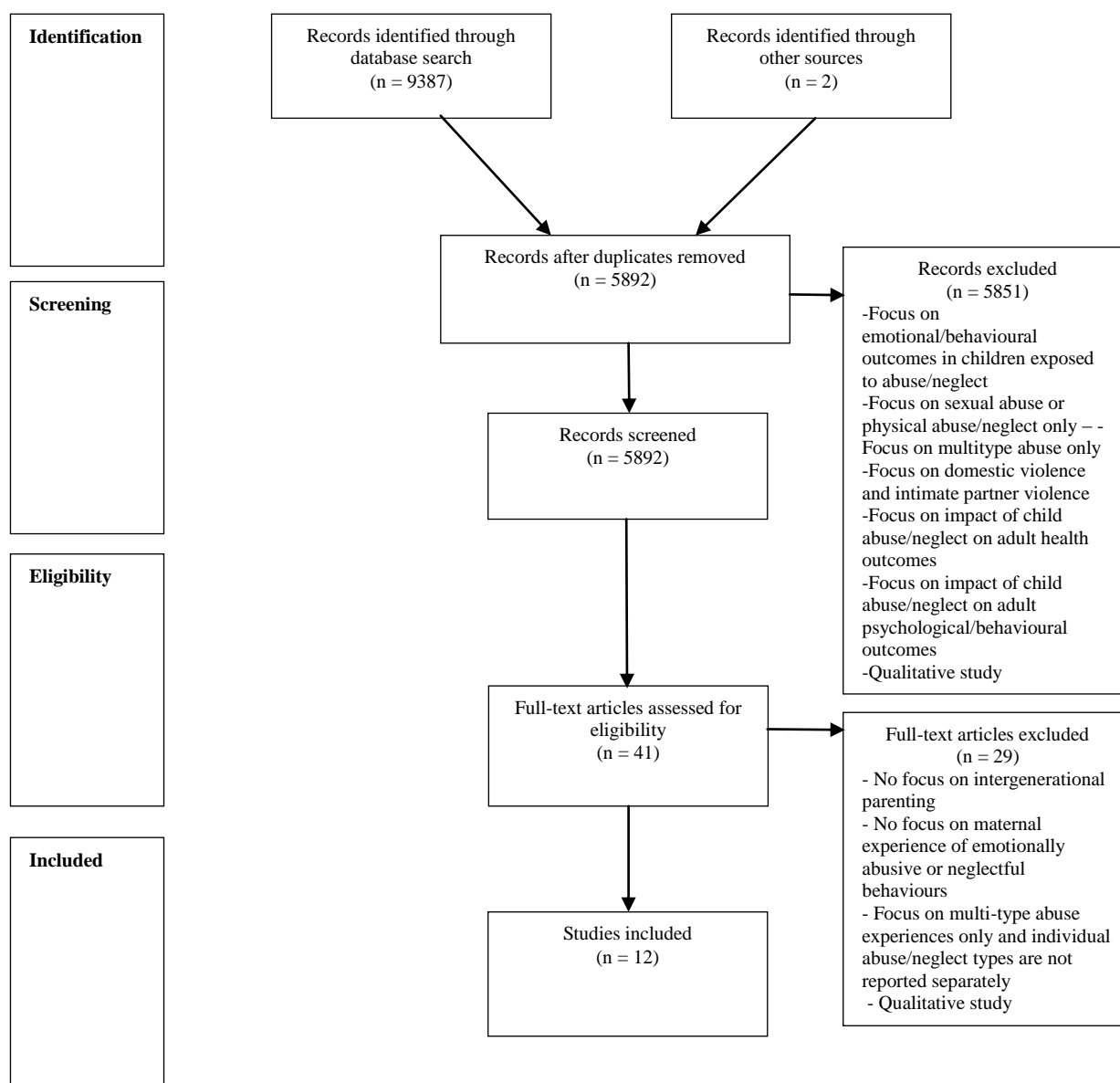
A quality assessment tool was designed to assess the methodological quality of papers included (see Appendix 1). This was based on guidance published by the Scottish Intercollegiate Guidelines Network (SIGN, 2011) for cohort studies, and the check-lists developed by Ertem *et al.* (2000) and Thornberry *et al.* (2012). Thirteen

criteria were developed, each of which had six outcome ratings. Papers were rated against each criterion and scores were allocated depending on whether the criterion was evaluated to be: 'well covered' (2 points), 'adequately addressed' (1 point), 'poorly addressed', 'not addressed', 'not reported' or 'not applicable' (0 points). A maximum of 26 points was available (see Table 3). Quality assessment was completed by M.H. A second author (A.T) rated a random selection of four of the papers to establish inter-rater reliability. Prior to this, one paper was jointly reviewed and rated to highlight areas which required to be clarified and the tool was subsequently amended where required. Cohen's Kappa (Cohen, 1960) indicated high agreement between both raters' scores, $K = .870$ (CI: .750, .989), $p < .001$.

Results

The search produced a total of 9,387 papers (see Figure 1 for an outline of the search process). Following removal of duplicates and examination of the titles or abstracts of the remaining papers, 41 articles were retained for full text review. Two further articles were identified from reference lists. Of these, 29 articles were excluded based on inclusion/exclusion criteria (see Appendix 2), resulting in 12 articles retained for review.

Figure 1: *Prisma (2009) flow diagram outlining the search strategy*



Description of studies

As Table 1 illustrates, studies were heterogeneous, exploring the association between emotionally abusive and/or neglectful childhood experiences and a range of subsequent parenting attitudes, outcomes and behaviours. A variety of emotionally abusive/neglectful childhood experiences were described, including emotional abuse and emotional neglect, emotional withdrawal, verbal hostility and psychological neglect. Parenting outcomes included parenting stress, parenting competence, self-efficacy, sensitivity, attachment and maltreatment potential.

A total of 3,758 adult participants (composite mean age 30.19 years) were recruited across the 12 studies. The mean standard deviation of age calculated from the eight studies reporting this was 6.22. All participants were mothers or expectant mothers.

Three studies recruited participants from clinical settings, i.e., child mental health services (Zalewski *et al.*, 2013), programs serving 'at-risk' mothers (Caldwell *et al.*, 2011) and child welfare services (Haapsalo and Aaltonen, 1999). All other participants were recruited from a variety of community settings.

The majority of studies were carried out in the United States (US), with the remaining five carried out in Sweden (Siddqui *et al.*, 2000), Spain (De Paul and Domenech, 2000), Japan (Fujiwara *et al.*, 2011), Canada (Pereira *et al.*, 2012) and Finland (Haapasalo and Aaltonen, 1999). Ethnicity of participants varied across studies. Four studies reported the majority of participants to be Caucasian (Lang *et*

al., 2010; Malone *et al.*, 2010; Pereira *et al.*, 2012; Zalewski *et al.*, 2013) and three reported the majority to be African-American or Black (Bert *et al.*, 2009; Chung *et al.*, 2009; Zuravin and Fontanella, 1999). Caldwell *et al.* (2011) reported a mixed sample of Caucasian (51%) and Hispanic/Latina (46%) participants. Four studies did not specify participants' ethnicity (De Paul and Domenech, 2000; Fujiwara *et al.*, 2011; Haapasalo and Aaltonen, 1999; Siddiqui *et al.*, 2000).

Four studies used a cohort design (Chung *et al.*, 2009; De Paul and Domenech, 2000; Lang *et al.*, 2010; Malone *et al.*, 2010) and one used a case-control design (Haapasalo and Aaltonen, 1999). All others were cross-sectional. The majority of studies used self-report measures of parenting attitudes, beliefs and behaviours. Only two studies used an independent/observer rating of maternal behaviour (Pereira *et al.*, 2012; Zalewski *et al.*, 2013).

There was wide variability across studies in terms of the psychological aspects of the early parent-child relationship which were explored. Similarly, the subsequent parenting factors focussed on were also variable. A wide range of instruments was used to measure childhood experiences and parenting behaviours. Correlation analysis was used in most studies (i.e. bivariate correlation, canonical correlation, regression analysis) with analysis of covariance and analysis of variance used in two studies (De Paul and Domenech, 2000; Malone *et al.*, 2010) (see Table 2).

Methodological quality of papers reviewed

Papers were rated against our quality assessment tool (see Table 3) and categorised as meeting 'all or most criteria', 'some criteria' or 'few or no criteria' (++/+/-). Retrospective studies were awarded a maximum rating of '+' due to acknowledged weaknesses in this type of design (SIGN, 2011). Of the twelve papers reviewed, all met 'some criteria'; none met 'all or most criteria'. Overall, the papers reviewed were of a relatively low quality.

In order to facilitate clarity within this review, we summarised articles into three main categories based on parenting outcomes. The first category explores the impact of emotionally abusive and neglectful childhood experiences on parents' beliefs about their parenting competence. The second looks at the effect of these early experiences on the ways in which parents relate to their children. The third focuses on the impact on subsequent parenting behaviours.

Table 1: Overview of Quality Rating, Demographic Information and Study Variables of included studies

Study	Design	Participants	Age	Demographics	Predictor Variables(s)	Parenting variables(s) measured	Measures used	Quality rating (0,+, ++)
Siddiqui <i>et al.</i> (2000) Sweden	Cross-sectional	161 expectant mothers	Median Age: 30 Range (21-50)	74.8% of participants educated to at least High-school level. Recruited from mother health centres.	Emotional Warmth (N)	Prenatal attachment (R)	Own Memories of Child Rearing (EMBU; Perris <i>et al.</i> , 1981) Prenatal Attachment Inventory (PAI; Müller, 1993)	+
Zalewski <i>et al.</i> (2013) US	Cross-sectional	95 mother-child dyads	Maternal mean age: 44 (SD =7.5) Child Mean age: 15.05	77% Caucasian Recruited via various child mental health services 95% of mothers educated to at least High-school level.	Emotional abuse (A) Emotional neglect (N)	Acceptance and psychological control (R)	Childhood Trauma Questionnaire-Short Form (CTQ-SF; Bernstein and Fink, 1998; Bernstein <i>et al.</i> , 2003) Child Report of Parent Behavior Inventory (CRPBI; Margolies and Weintraub, 1977).	+
Chung <i>et al.</i> (2009) US	Cohort	1265 mothers	Mean age: 24 Range (14-44, SD = 6)	70% Black Recruited via Health Centres 60% of mothers educated to at least High-school level.	Verbal hostility (A)	Infant spanking (B) Attitudes toward corporal punishment (B)	Single-item survey questions (Verbal Hostility; Infant Spanking). Adult-Adolescent Parenting Inventory (Bavolek and Keene, 1999)	+

Study	Design	Participants	Age	Demographics	Predictor Variables(s)	Parenting variables(s) measured	Measures used	Quality rating (0,+, ++)
Malone <i>et al.</i> (2010) US	Cohort	204 expectant mothers	Mean age: 25 Range (18-40, SD = 5)	63.7% Caucasian Recruited via a range of clinics and community venues. 54.9% educated above High-school level.	Emotional abuse (A) Emotional neglect (N)	Maternal representations of the infant (R)	Childhood Trauma Questionnaire (Bernstein and Fink, 1998) Working Model of the Child Interview (WMCI; Zenah <i>et al.</i> , 1990)	+
De Paul and Domenech (2000) Spain	Cohort	48 mothers(24 adolescent, 24 adult)	Mean age: 23.25	Recruited from a health centre in the Basque Country, Spain. 55.45% educated to at least Secondary School level.	Emotional withdrawal (N)	Risk of child maltreatment perpetration (B)	The Maternal History Interview (MHI; Altemeer <i>et al.</i> , 1984) Child Abuse Potential Inventory (CAPI; Milner, 1986)	+
Zuravin and Fontanella (1999) US	Cross- sectional	516 mothers	Mean age: 29.6 (SD=7.05).	60% African American 40% Caucasian 48% educated above 12 th grade. Recruited from Family Aid Centres	Verbal abuse (A) Emotional support (N)	Perceived Parenting Competence (C)	Dichotomous measure (Verbal abuse) Emotional support scale adapted from the Emotional Needs Met and Relationship with the Parents subscales of the Michigan Screening Profile of Parenting (Helfer <i>et al.</i> , 1978). The Parenting Competence Scale (Johnson	+

Study	Design	Participants	Age	Demographics	Predictor Variables(s)	Parenting variables(s) measured	Measures used	Quality rating (0,+, ++)
							and Mash, 1989).	
Bert <i>et al.</i> (2009) US	Cross- sectional	681 teen, adult low-resource and adult high-resource first time mothers.	Mean age: 19.8 years Range: 14-36	68.5% African American Recruited through primary care facilities. 63% educated to at least 12 th grade.	Emotional Abuse (A)	Risk of child maltreatment perpetration (B) Parenting style (R)	Childhood Trauma Questionnaire (CTQ; Bernstein <i>et al.</i> , 1994). Child Abuse Potential Inventory (CAPI; Milner, 1986). Parenting Style Expectations Questionnaire (Bavolek, 1984).	+
Lang <i>et al.</i> (2010) US	Cohort	31 mothers	Mean age: 29.27 (SD = 5.85).	61.4% Caucasian 79.6% educated above High-school level Recruited through flyers in obstetric clinics and advertisements in a local circular.	Emotional Abuse (A)	Perceptions of infant behaviour (R) Perceived Parenting Competence (C) Parenting stress (R)	Childhood Trauma Questionnaire (Bernstein and Fink, 1998). The Infant Behaviour Questionnaire-Revised (IBQ-R; Gartstein and Rothbart, 2003) The Parenting Sense of Competence Scale (PSOC; Wagner and Morse, 1975). The Parenting Stress Index – Short Form (PSI-SF; Abidin, 1995).	+

Study	Design	Participants	Age	Demographics	Predictor Variables(s)	Parenting variables(s) measured	Measures used	Quality rating (0,+, ++)
Fujiwara <i>et al.</i> (2011) Japan	Cross-sectional	340 mothers	Mean age: 35.8 years (SD = 7.1)	Recruited from 'mother-child' welfare homes in Japan	Psychological abuse (A)	Parenting behaviour (Praise/Play) (B)	Modified version of the Childhood Trauma Questionnaire (CTQ; Bernstein <i>et al.</i> , 1994) Modification of the Home Observation for Measurement of the Environment Scale (Caldwell and Bradley, 1984).	+
Pereira <i>et al.</i> (2012) Canada	Cross-sectional	291 mothers	Mean age: 33.38 years (SD = 4.35)	67.2% Caucasian Recruited from various community venues	Emotional abuse (A) Emotional neglect (N)	Parenting stress (R) Maternal sensitivity (R)	Childhood Trauma Questionnaire (CTQ; Bernstein and Fink, 1998) Parenting Stress Index-Short Form (PSI-SF, Abidin, 1995) Maternal Behavior Q-Sort, Version 3.1 (MBQS, Pederson <i>et al.</i> , 1999; Pederson <i>et al.</i> , 1990).	+
Caldwell <i>et al.</i> (2011) US	Cross-sectional	76 mothers	Mean age: 28 years (SD = 6.91).	51% Caucasian, 46% Hispanic/Latina 66% educated above High-school level Recruited from community programs	Emotional abuse (A) Emotional neglect (N)	Parental self-efficacy (C)	Childhood Trauma Questionnaire (CTQ; Bernstein <i>et al.</i> , 1994). Parenting sense of competence scale (PSOC;	+

Study	Design	Participants	Age	Demographics	Predictor Variables(s)	Parenting variables(s) measured	Measures used	Quality rating (0,+, ++)
serving at-risk mothers.							Gibauld-Wallston and Wandersman, 1978)	
Haapsalo and Aaltonen (1999) Finland	Cross- sectional	50 mothers	Mean age: 39.98	Recruited via child welfare authorities; matched sample recruited via schools	Psychological abuse (A)	Physical abuse (B) Punitiveness (B) Psychological abuse (B)	Childhood psychological abuse was assessed as present or absent via a series of open questions within an interview format. Child directed physical abuse was measured via 10 interview questions; child directed psychological abuse was measured via 9 interview questions; child directed punitiveness was measured via 14 interview questions (all measured on a five-point scale; never to constantly).	+
A = Abuse; N = Neglect; C = Competence; R = Relationships; B = Behaviours								

Table 2: *Overview of study aims, results and statistical analysis*

Study	Relevant study aims	Factors adjusted for	Statistical analysis	Results of study
Siddiqui <i>et al.</i> (2000)	To explore the relationship between expectant mothers childhood experience of parental emotional warmth and her subsequent prenatal attachment.	Maternal age Employment status / Educational level Pregnancy status	Spearman correlations Multiple regression	<ul style="list-style-type: none">• Experience of childhood maternal emotional warmth was predictive of greater prenatal attachment between the expectant mother and her unborn child.
Zalewski <i>et al.</i> (2013)	To examine the relationship between maternal history of childhood EA and EN, maternal depression and parenting (child-reported parental acceptance and psychological control).	Maternal depression Parity Single parent status Minority race Maternal education and income	Zero-order correlations Univariate regressions Multiple linear regression analyses	<ul style="list-style-type: none">• Maternal history of EA was negatively correlated with child report of maternal acceptance and positively correlated with maternal psychological control.• Mothers with childhood experience of EA were significantly lower in acceptance and higher in psychological control.• Maternal childhood EA was found to be independently related to offspring report of lower acceptance and greater psychological control.• Maternal history of EN was positively correlated with maternal psychological control. Mothers with childhood EN were significantly higher in psychological control.• No relationship was found between maternal history of EN and maternal acceptance.• A trend-level association was found between maternal childhood EN and psychological control when maternal depression and other parenting risk factors were controlled for.

Study	Relevant study aims	Factors adjusted for	Statistical analysis	Results of study
Chung <i>et al.</i> (2009)	To examine the relationship between maternal childhood experience of verbal hostility and current parenting attitudes to corporal punishment and use of infant spanking.	-	Bivariate analysis	<ul style="list-style-type: none"> Mothers exposed to verbal hostility in childhood were found to be more likely to report use of infant spanking. Mothers exposed to verbal hostility were also found to be more likely to value use of corporal punishment.
Malone <i>et al.</i> (2010)	To explore the relationship between maternal history of EA or EN and her internal working model of her child during pregnancy (balanced, distorted or disengaged prenatal maternal representations).	Domestic violence	Multivariate analysis of covariance	<ul style="list-style-type: none"> After controlling for domestic violence, neither EA nor EN distinguished between prenatal maternal representations of the mother's unborn child.
De Paul and Domenech (2000).	To investigate the relationship between maternal childhood memories of emotional withdrawal in the parent-child relationship and risk of child physical abuse perpetration.	-	Univariate analysis of variance	<ul style="list-style-type: none"> No main effect of childhood memory of emotional withdrawal on maltreatment potential was found.

Study	Relevant study aims	Factors adjusted for	Statistical analysis	Results of study
Zuravin and Fontanella (1999)	To investigate the relationship between a range of growing up experiences (including emotional support and verbal abuse) and perceived parenting competence and verbally abusive parenting behaviours.	–	Bivariate correlation analysis	<ul style="list-style-type: none"> Maternal history of emotionally supportive parenting was positively correlated with perceived parenting competence and negatively correlated with verbally abusive parenting behaviours. Maternal experience of childhood verbal abuse was not associated with parenting competence. Maternal childhood experience of verbal abuse was positively correlated with self-report of current verbally abusive behaviours towards the mothers own child.
Bert <i>et al.</i> (2009)	To examine how maternal history of emotional abuse is associated with current parenting knowledge and behaviour with respect to mothers' six-month old children.	Maternal characteristics (teen, adult low-resource, adult high-resource).	Correlation analysis Multiple regression analyses	<ul style="list-style-type: none"> Maternal exposure to childhood emotional abuse was not related to knowledge of infant development. Maternal exposure to childhood emotional abuse was negatively correlated with maternal responsiveness. Increases in maternal report of childhood emotional abuse were also associated with increased maternal punishment, abuse/neglect scores and self-report of child abuse potential. Multiple regression analyses showed that (controlling for maternal characteristics) childhood emotional abuse accounted for a significant amount of the variance found among mothers' responsivity/empathy, punishment, abuse/neglect and child abuse potential scores.
Lang <i>et al.</i> (2010)	To investigate the relationship between maternal childhood emotional abuse and parent-child interactions, parenting competence and distress and perceptions	Maternal depression PTSD Physical abuse	Multiple regression analysis (predictive level statistics).	<ul style="list-style-type: none"> Maternal history of emotional abuse was predictive of more dysfunctional parent-child interactions. Maternal history of emotional abuse was not predictive of parental distress in the parenting role, defensive responding or sense of competence. Maternal history of emotional abuse was predictive of less infant distress to limitations and faster

Study	Relevant study aims	Factors adjusted for	Statistical analysis	Results of study
	of infant temperament.	Sexual abuse		falling reactivity/rate of recovery.
Fujiwara <i>et al.</i> (2011)	To examine the impact of maternal childhood psychological abuse on parenting behaviours (play/praise).	Domestic violence Depression Dissociation Traumatic symptom	Multiple regression analysis	<ul style="list-style-type: none"> Maternal psychological abuse was not associated with current praise or play behaviours.
Pereira <i>et al.</i> (2012)	To explore the relationship between maternal experience of childhood EA and EN, parenting stress and maternal sensitivity.	Marital status Family income Infant sex Number of siblings	Correlation analysis	<ul style="list-style-type: none"> Maternal childhood emotional abuse was significantly positively correlated with parenting stress. Maternal childhood emotional neglect was also significantly positively correlated with parenting stress. Maternal childhood emotional abuse was not significantly correlated with maternal sensitivity. Maternal childhood emotional neglect was significantly negatively correlated with maternal sensitivity.
Caldwell <i>et al.</i> (2011)	To investigate the relationship between maternal childhood EA and EN and parental self-efficacy.	-	Bivariate correlation analysis	<ul style="list-style-type: none"> Both maternal childhood emotional abuse and emotional neglect were significantly negatively correlated with parental self-efficacy.

Study	Relevant study aims	Factors adjusted for	Statistical analysis	Results of study
Haapsalo and Aaltonen (1999)	To investigate whether mothers' self-reported childhood experiences could explain maltreatment directed at their own children and punitiveness.	Group status (contact with child protection services due to own experience of abuse) Socioeconomic status Social problems	Hierarchical multiple regression analysis	<ul style="list-style-type: none"> • Maternal childhood self-report of psychological abuse was predictive of maternal punitiveness. • Maternal childhood self-report of psychological abuse was not a significant predictor of maternal physical child abuse • Maternal childhood self-report of psychological abuse was not a significant predictor of maternal psychological child abuse.

Table 3: *Quality assessment of each study reviewed*

Study	Focussed question	Participation rate	Attrition rate	Baseline demographics	Maltreated and non- maltreated	Comparison group maltreatment status assessed	Clear definition of EA/EN	Valid/Reliable measure of EA/EN	Valid/Reliable measure of outcome	Prospective	Independent rating of outcome	Confounders	Appropriate statistical analysis	Total (/26)
Bert <i>et al.</i> (2009)	2	1	0	2	2	0	2	2	2	0	0	1	1	15
Caldwell <i>et al.</i> (2011)	2	1	0	2	2	0	2	1	2	0	0	0	1	13
Lang <i>et al.</i> (2010)	2	0	1	2	2	0	2	2	2	1	0	2	1	17
De Paul and Domenech (2000)	2	0	0	2	2	0	1	1	2	0	0	0	1	11
Zuravin and Fontanella (1999)	2	1	1	2	2	0	1	0	2	0	0	0	1	12
Fujiwara <i>et al.</i> (2011)	2	1	1	2	2	0	1	0	0	0	0	2	2	13
Pereira <i>et al.</i> (2012)	2	1	0	2	2	0	2	2	2	0	1	1	1	16

Study	Focussed question	Participation rate	Attrition rate	Baseline demographics	Maltreated and non-maltreated	Comparison group maltreatment status assessed	Clear definition of EA/EN	Valid/Reliable measure of EA/EN	Valid/Reliable measure of outcome	Prospective	Independent rating of outcome	Confounders	Appropriate statistical analysis	Total (/26)
Malone <i>et al.</i> (2010)	2	1	2	2	2	0	1	2	2	0	0	1	2	17
Chung <i>et al.</i> (2009)	2	1	1	2	2	0	1	0	1	1	0	0	1	12
Siddiqui <i>et al.</i> (2000)	1	1	1	2	2	0	2	2	2	0	0	1	2	16
Zalewski <i>et al.</i> (2013)	2	1	0	2	2	0	2	2	2	0	2	2	2	19
Haapsalo and Aaltonen (1999)	1	0	0	0	2	2	1	0	0	0	0	1	2	9

Competence in the parenting role

Three studies examined the effect of mothers' emotionally abusive and neglectful childhood experiences on subsequent self-perceptions of competence and self-efficacy within the parenting role (see Table 1). Caldwell *et al.* (2011) reported that, compared with other forms of childhood maltreatment, maternal emotional abuse was most strongly associated with lower levels of parental self-efficacy. Similarly, maternal history of emotional neglect was also found to be associated with lower levels of parental self-efficacy. Conversely, Zuravin and Fontanella (1999) found no relationship between maternal childhood experience of verbal abuse and perceived parenting competence. Lang *et al.* (2010) also found that maternal experience of childhood emotional abuse did not predict perceived parenting competence. Zuravin and Fontanella (1999) did however find that maternal perceptions of childhood emotional support increased the likelihood of perceived parenting competence.

Impact on the parent-child relationship

Six studies explored the impact of mothers' emotionally abusive and neglectful childhood experiences on the way in which they related to their children, using measures of parenting stress (Lang *et al.*, 2010; Pereira *et al.*, 2012), prenatal attachment (Siddiqui *et al.*, 2000), acceptance and psychological control (Zalewski *et al.* 2013), maternal representations of the infant (Malone *et al.*, 2010), perceptions of infant behaviour (Lang *et al.*, 2010), parenting style (Bert *et al.*, 1999), and maternal sensitivity (Pereira *et al.*, 2012).

Bert *et al.* (2009) found that maternal self-report of emotional abuse in childhood was significantly associated with decreased responsivity and empathy towards their six-month old infants. Lang *et al.* (2010) presented conflicting evidence for the relationship between maternal history of childhood emotional abuse and parent-child interactions and distress in the parental role in a small sample of mothers (n=31). Although the overall regression model (exploring emotional, physical and sexual abuse together) was not found to account for a statistically significant amount of variance, predictor-level statistics highlighted that maternal history of childhood emotional abuse was predictive of more dysfunctional parent-child interactions. Maternal childhood emotional abuse was, however, not predictive of defensive responding or parental distress.

Pereira *et al.* (2012) reported significant relationships between maternal experience of childhood emotional abuse and emotional neglect and increased ratings of parental distress, dysfunctional interaction, perceptions of child difficulty and total stress score. A significant relationship was also found between maternal history of emotional neglect and observer-rating of lower maternal sensitivity during mother-child interactions. However, although maternal history of emotional abuse was also associated with less maternal sensitivity, this relationship was not found to be significant.

Zalewski *et al.* (2013) found that mothers who self-reported childhood emotional abuse were rated by their children as being significantly lower in acceptance and higher in psychological control. This relationship was independent of

maternal depression and other parental risk factors, (i.e. maternal education, maternal income, minority race and single parent status). Maternal history of emotional neglect was also positively related to maternal psychological control; however, this failed to remain significant when maternal depression and other parenting risk factors were controlled for. The relationship between emotional neglect and maternal acceptance was not significant.

Siddiqui *et al.* (2000) reported on a study which found maternal childhood self-reported experience of greater emotional warmth to be predictive of stronger prenatal attachment. Conversely, Malone *et al.* (2010) found that prenatal maternal representations ('balanced' vs. 'non-balanced') of the infant during the third trimester of pregnancy were not differentiated by maternal childhood experience of emotional abuse or emotional neglect.

Impact on parenting behaviours.

Studies reviewed in this section focussed on aspects of parenting behaviours as outcomes of maternal childhood exposure to emotionally abusive/neglectful experiences (see Table 1).

Bert *et al.* (2009) found that an increase in self-report of maternal childhood emotional abuse was associated with an increase in maternal opinions towards punishment and abuse/neglect scores. Exposure to emotional abuse was also associated with an increase in report of propensity toward abuse. Similarly, Chung *et al.*, (2009) found that mothers exposed to verbal hostility in childhood were more

likely to use 'infant spanking' and more likely to value corporal punishment. Verbal hostility and use of 'infant spanking' were, however, identified as being present in response to self-report on two single survey items. Conversely, De Paul and Domenech (2000) found that mothers who self-reported parental emotional withdrawal in childhood did not represent a higher risk for physical abuse than those who did not identify these early experiences.

Haaspasalo and Aaltonen (1999) found that self-reported maternal childhood psychological abuse predicted maternal punitiveness but not maternal physical or psychological child-directed abuse. The authors obtained self-report of childhood psychological abuse through a series of open questions. A semi-structured interview was also used to obtain mothers' self-report of physical and psychological abuse and punitiveness directed towards their own children.

Fujiwara and colleagues (2011) examined the impact of childhood experience of psychological abuse on subsequent parenting behaviours, specifically the use of praise and play. History of psychological abuse was assessed using a two-item subscale of a self-report measure adapted from the Childhood Trauma Questionnaire (Bernstein *et al.*, 1994). Praise and play behaviours were assessed using two survey questions developed on the basis of the Home Observation for Measurement of the Environment scale (Caldwell and Bradley, 1984). The authors found that maternal self-report of childhood psychological abuse was not associated with less child-directed play or praise behaviours.

Discussion

Summary of evidence on the impact of emotionally abusive and neglectful experiences on parenting outcomes

From the articles reviewed, associations were found between emotionally abusive and neglectful childhood experiences and greater dysfunctional parent-child interactions (Lang *et al.*, 2010; Pereira *et al.*, 2012), lower empathy (Bert *et al.*, 2009), lower acceptance (Zalewski *et al.*, 2013), greater psychological control (Zalewski *et al.*, 2013), greater child maltreatment potential (Bert *et al.*, 2009), use of infant spanking (Chung *et al.* 2009), attitudes toward punishment (Bert *et al.*, 2009; Chung *et al.*, 2009) and punitiveness (Haapasalo and Aaltonen, 1999). Maternal perceptions of greater childhood experience of emotional warmth were also related to greater pre-natal attachment (Siddiqui *et al.*, 2000), suggesting that the emotional dimensions of the parent-child relationship may have a transgenerational impact on the formation of key attachment relationships between focal generation parents and their own children.

There were, however, a range of methodological limitations that reduced our ability to draw firm conclusions from the extant literature. These included issues such as small sample sizes, lack of specificity in terms of definitions of maltreatment experiences, lack of established validity or reliability in terms of a number of the predictor and outcomes measures used, reliance on self-report data and retrospective designs, failure to take into account important confounding variables in research designs and lack of consistency in definitions of emotional abuse and emotional neglect (see Table 3). Omission of key covariates reduces our ability to understand

the way in which they may impact on, or interact with, the relationship between the predictor and outcome variables. Even where studies used the same measure (e.g. the CTQ), variation was found in the version used (e.g. the 70-item version vs. the 28-item version). This places an additional limitation on our ability to synthesise results (see Baker and Maiorino, 2010, for a review of methodological issues associated with use of the CTQ).

Overall, mixed evidence was found for an association between maternal childhood experience of emotional abusive/neglectful behaviours and subsequent self-perceptions of parenting competence. More consistent evidence was found of an impact on the parent-child relationship, with studies in this section demonstrating more frequent use of validated and reliable measures of exposure and outcome. Tentative support was also found for a relationship between these childhood experiences and negative parenting behaviours, although limitations within these studies (e.g. use of single-item measures) reduce the strength of conclusions which can be drawn.

Overview of studies reviewed

Despite awareness of the impact of childhood experience of emotional abuse and emotional neglect on subsequent intra- and interpersonal functioning, there have been very few studies undertaken to date which examine the impact of these experiences on the subsequent second-generation parent-child relationship. This systematic review is, to the best of our knowledge, the first to attempt a review of such studies.

Studies included in our review varied in terms of their design and analysis, the aspects of emotionally abusive/neglectful experiences and outcomes explored, their utilisation of clinical and non-clinical samples, and in terms of their approaches to measurement of predictor and outcome variables. The majority of studies were cross-sectional and retrospective in design. Only three studies used a prospective design (Chung *et al.*, 2009; Lang *et al.*, 2010; Malone *et al.*, 2010). All studies utilised self-report measures of childhood maltreatment experiences, with approximately half of these utilising the Childhood Trauma Questionnaire (CTQ; Bernstein and Fink, 1998). The majority of studies also used self-report outcome measures, resulting in an increased risk of bias in reporting (Brewin *et al.*, 1993). Only two studies (Pereira *et al.*, 2012; Zalewski *et al.*, 2013) used an independent-rating of the outcome variable. As discussed above, this variability between studies places a limitation on our ability to synthesise findings and necessitates caution in the interpretation of any relationship between predictor and outcome variables. Omission of key covariates is of particular importance given the variability in clinical and non-clinical samples. It is important that key variables, such as maternal mental health, are included within analyses or controlled for in order that we can better understand the relationship between early maltreatment experiences and subsequent parenting outcomes.

According to our classification criteria, Zalewski *et al.*'s. (2013) study was the most methodologically strong (see Table 3). The authors found that, after controlling for maternal depression severity and a range of other parenting risk factors (e.g.

maternal age), maternal childhood emotional abuse was independently related to child-report of lower acceptance and greater psychological control within the parent-child relationship. Use of an independent (offspring) report of the outcome variable was a strength of the study; reducing the potential for maternal self-report bias and facilitating an understanding of the potential impact of maternal childhood abuse experiences on the parent-child relationship from the child's perspective. However, as the authors' acknowledge, use of multi-informant perspective to measure parenting would strengthen the study by separating the potentially unique contribution of child factors to the parenting behaviours measured. This may be important given the potential for parent-child relationship factors to confound accurate reporting of parenting behaviours. A further limitation is the use of a retrospective design which may result in potential for over- or underestimation of child maltreatment experiences.

This review highlights a range of adverse outcomes that may be associated with a maternal history of emotionally abusive and neglectful experiences in childhood. Attachment theory, which describes the development of internal working models through interpersonal interactions with primary caregivers (Bowlby, 1969), provides a meaningful framework within which these findings can be understood. This framework suggests that children who have learned to fear relational experiences, or who have struggled to have their needs met, may develop internal working models of others as abusive, hostile or neglectful. Their desire to have their needs met are therefore likely to conflict with the fear that these interactions invoke; leading to inconsistent approach and avoidance behaviours (Main and Hesse, 1990).

These strategies, which were designed to be adaptive in childhood, are likely to continue to be utilised out-with conscious awareness in adulthood; including within subsequent parent-child relationships. Mistrust and suspiciousness of others actions, and conflicting desires to be both self-sufficient and to keep others close, are likely to impact on the parent-child relationship; particularly during times of conflict when behaviour may be most strongly guided by these early models of self and others.

The relationship between early experiences of emotional abuse and neglect and the impact on parenting outcomes highlighted appears to be particularly evident in terms of the impact on the parent child relationship. This may be a consequence of the impact of these maltreatment experiences on the attachment relationship and the development of early maladaptive schemas, through which interpersonal situations are filtered. Mixed evidence in relation to the impact on subsequent parenting behaviours (e.g. punishment) may therefore be explained in the context of the specific nature of these early maltreatment experiences and the possible development of a qualitatively different set of maladaptive coping responses than may be observed in relation to physical abuse. Further research would be required to explore these relationships further.

Clinical Implications

For practitioners, these results highlight the importance of considering maternal childhood experiences when trying to make sense of children's difficulties and when promoting, and intervening in, infant health and wellbeing, and parenting.

Although there is mixed evidence for a relationship between maternal experience of emotionally abusive or neglectful behaviours in childhood and mothers' subsequent pre-natal representations and attachment to their infant, it is important that research continues to explore this area. Indeed, attention to and identification of pre-natal maternal perceptions of her unborn child would facilitate early intervention in cases where attachment difficulties are indicated, or where maternal representations present as distorted or disengaged. Facilitating a joint understanding of the impact of early maltreatment experiences on the subsequent emotional dimensions of the parent-child relationship is increasingly recognised as a useful tool in the encouragement and strengthening of the parent-child relationship (see Dozier and Bick, 2007). Opportunities for parents to reflect on their own childhood experiences and the ways in which these may impact on their relationship with their own children may provide both opportunities for early intervention and for the destigmatisation of later help-seeking behaviours.

Directions for future research

This review indicates that maternal emotionally abusive and neglectful childhood experiences may have a detrimental impact on subsequent second-generation parenting outcomes. However, the paucity of research available, and the range of limitations discussed above, reduces our ability to establish clear associations between these experiences and subsequent outcomes. Furthermore, the majority of studies reviewed here included analyses of emotional abuse and emotional neglect as secondary outcome data rather than as the primary research aim, further weakening the strength of conclusions which can be drawn.

It is important that research is carried out which explores the impact of these forms of abuse on parenting more directly and which controls for important confounding variables in order that we can better understand this relationship. Exploration of factors which might mediate these associations is also likely to further increase our understanding of the route through which these experiences impact on parenting. Related to this, an increased understanding of the potential differential impact of the child's age, the severity and frequency of abusive experiences, and the child's relationship to the perpetrator is likely to facilitate more clarity in terms of the professional response to these factors and better guide interventions. A consideration of protective factors is also of importance in guiding our knowledge in this area.

Utilisation of prospective designs would also strengthen the research literature through facilitating a consideration of the impact of childhood maltreatment experiences on the parent-child relationship over time and whether aspects of this are stable or fluid. These considerations are of importance in increasing our knowledge of the cognitive and emotional correlates of childhood emotional maltreatment experiences and the ways in which interventions can be tailored to best support parents and children.

Limitations

We recognise a limitation in our failure to consider the potential differential impact of paternal maltreatment experiences on parenting. It may be that associated outcomes present differently and we acknowledge that this is an important

consideration for future research. We also recognise a potential limitation in our failure to extend our focus on parenting outcomes to include second-generation offspring outcomes as this may have increased our knowledge of intergenerational effects. Naughton and colleagues' (2013) review highlights a range of childhood emotional, behavioural and developmental consequences of emotional abuse and neglect. A consideration of child outcomes within an intergenerational perspective may have increased our understanding of the way in which mothers' own early experience may contribute to specific child outcomes.

We are also aware that our inclusion of studies where there is heterogeneity in how abusive and neglectful experiences are defined and measured places limitations on our ability to synthesise outcomes. However, a broad and comprehensive review was felt important in gathering together the available evidence at this stage, outlining important methodological issues and highlighting the need for further research. Finally, a limitation is recognised in our inclusion of studies where experiences of emotional abuse and/or emotional neglect were not the primary focus (i.e. where a simple exploration of emotional abuse was carried out in the context of a multi-type maltreatment design). This weakens the strength of conclusions drawn and the outcomes of each study should be weighed up in relation to its quality assessment (see Table 3).

Conclusions

Tentative evidence is presented of a relationship between maternal experiences of emotional abuse and neglect in childhood, and a negative impact on the subsequent parent-child relationship and parenting behaviours. Evidence in relation to the impact on parenting competence is mixed, with few papers exploring this to date. These findings indicate that emotionally abusive and neglectful parenting behaviours impact not only at the individual level, through impairments in intra- and interpersonal functioning, but are also associated with secondary risk to subsequent generations through resultant parenting difficulties. This highlights the importance of building on our knowledge of risk and protective factors in relation to emotional abuse/neglect so that interventions can be appropriately developed and tailored to meet the needs of parents and children. A call is therefore made for further research in this area and for the utilisation of validated and standardised measures of exposure and outcome, multi-informant reporters (who are blind to maltreatment status) and prospective designs. A future review of the research literature within this area would be of value in exploring these issues further and in attempting to synthesise the research.

References

- Bailey, H.N. et al., 2012. The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child abuse & neglect* **36**(3): 236–46. doi:10.1016/j.chiabu.2011.11.005
- Baker, A.J.L. & Maiorino, E., 2010. Children and Youth Services Review Assessments of emotional abuse and neglect with the CTQ : Issues and estimates. *Children and Youth Services Review* **32**(5): 740–748. doi:10.1016/j.chilyouth.2010.01.011
- Barlow, J. & Schrader McMillan, A., 2010. *Safeguarding Children from Emotional Maltreatment: What Works*. London: Jessica Kingsley Publishers
- Bavolek, S.J., 1984. *Handbook for the adult-teen parenting inventory*. Schaumburg, IL: Family Development Associates.
- Bavolek, S.J & Keene, I., 1999. *Handbook for the Adult and Adolescent Parenting Inventory*. Eau Claire, WI: Family Development Resources.
- Bernstein, D., & Fink, L., 1998. *Childhood Trauma Questionnaire: A retrospective self-report*. San Antonio, TX: The Psychological Corporation.
- Bernstein, D. P. et al., 1994. Initial reliability and validity of a new retrospective measure of child abuse and neglect. *American Journal of Psychiatry* **151**: 1132–1136.
- Bernstein, D.P. et al., 2003. Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect* **27**(2): 169–190. doi:10.1016/S0145-2134(02)00541-0
- Bert, S.C., Guner, B.M. & Lanzi, R.G., 2009. The Influence of Maternal History of

- Abuse on Parenting Knowledge and Behavior. *Family relations* **58**(2): 176–187.
doi:10.1111/j.1741-3729.2008.00545.x
- Bowlby, J., 1969. *Attachment and loss*, Vol. 1: Attachment. New York: Basic Books.
- Brewin, C.R., Andrews, B., & Gotlib, I.H., 1993. Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin* **113**: 82-98.
- Briere, J. & Runtz, M., 1988. Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse & Neglect* **12**(3): 331–341.
- Briere, J. & Runtz, M., 1990. Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect* **14**: 357–364.
- Caldwell, B. & Bradley, R., 1984. *Home Observation for Measurement of the Environment (HOME) - Revised Edition*. University of Arkansas: Little Rock
- Caldwell, J.G. et al., 2011. Childhood Maltreatment, Adult Attachment, and Depression as Predictors of Parental Self-Efficacy in At-Risk Mothers. *Journal of Aggression, Maltreatment & Trauma* **20**(6):595–616.
doi:10.1080/10926771.2011.595763
- Chung, E.K. et al., 2009. Parenting attitudes and infant spanking: the influence of childhood experiences. *Pediatrics* **124**(2):278–86. doi:10.1542/peds.2008-3247
- Cicchetti, D. & Toth, S.L., 2005. Child maltreatment. *Annual Review of Clinical Psychology* **1**: 409–38. doi:10.1146/annurev.clinpsy.1.102803.144029
- Claussen, A. H. & Crittenden, P.M., 1991. Physical and psychological maltreatment:

- relations among types of maltreatment. *Child abuse & neglect* **15**(1-2): 5–18.
- Cohen, J., 1960. A coefficient of agreement for nominal scales. *Educational and Psychological Measurement* **20**:37-46.
- De Paúl, J. & Domenech, L., 2000. Childhood history of abuse and child abuse potential in adolescent mothers: a longitudinal study. *Child abuse & neglect* **24**(5):701–13.
- Dozier, M. & Bick, J., 2007. Changing caregivers: Coping with early adversity. *Psychiatric Annals* **37**: 411–445.
- Egeland, B., 1993. A history of abuse is a major risk factor for abusing in the next generation. In R. Gelles & D.R. Loseke (Eds.), *Current controversies on family violence*, pp.197-208. Newbury Park, CA: Sage Publications.
- Ertem, I.O., Leventhal, J.M. & Dobbs, S., 2000. Intergenerational continuity of child physical abuse: How good is the evidence? *Lancet* **356**(9232): 814–819.
- Fujiwara, T., Okuyama, M. & Izumi, M., 2012. The impact of childhood abuse history, domestic violence and mental health symptoms on parenting behaviour among mothers in Japan. *Child: care, health and development* **38**(4): 530–7.
doi: 10.1111/j.1365-2214.2011.01272.x
- Glaser, D., 2002. Emotional abuse and neglect (psychological maltreatment): a conceptual framework. *Child abuse & neglect* **26**(6-7): 697–714.
- Glaser, D., 2011. How to deal with emotional abuse and neglect: further development of a conceptual framework (FRAMEA). *Child abuse & neglect* **35**(10): 866–75.
- Haapasalo, J. & Aaltonen, T., 1999. Mothers' Abusive Childhood Predicts Child Abuse. *Child Abuse Review* **8**: 231–250.

- Hart, S.N. & Glaser, D., 2011. Psychological maltreatment - Maltreatment of the mind: A catalyst for advancing child protection toward proactive primary prevention and promotion of personal well-being. *Child Abuse and Neglect* **35**(10): 758–766.
- Kaplan, S. J., Pelcovitz, D. & Labruna, V. 1999. Child and adolescent abuse and neglect research: a review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal of the American Academy of Child & Adolescent Psychiatry* **38**(10): 1214-1222. doi:10.1097/00004583-199910000-00009
- Lang, A.J. et al., 2010. The impact of maternal childhood abuse on parenting and infant temperament. *Journal of child and adolescent psychiatric nursing : official publication of the Association of Child and Adolescent Psychiatric Nurses, Inc* **23**(2): 100–10. doi:10.1111/j.1744-6171.2010.00229.x
- Main, M., & Hesse, E. D., 1990. Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. Greenberg, D. Cicchetti, and M. Cummings, (Eds), *Attachment in the Preschool Years*. Chicago: Chicago University Press
- Malone, J.C. et al., 2010. Understanding the “Ghosts in the nursery” of pregnant women experiencing domestic violence: Prenatal maternal representations and histories of childhood maltreatment. *Infant Mental Health Journal* **31**(4): 432–454. doi:10.1002/imhj.20264
- Messman-Moore, T. & Coates, A.A., 2007. The impact of childhood psychological abuse on adult interpersonal conflict: The role of early maladaptive schemas and patterns of interpersonal behavior. *Journal of Emotional Abuse* **7**(2): 75–92.

doi:10.1300/J135v07n02_05

Milner, J. S., 1986. *The Child Abuse Potential Inventory: Manual*. (2nd ed.).

Webster, NC: Psytec.

Moher, D., Liberati A., Tetziaff, J., Altman, D.G. (2009). The PRISMA Group.

Preferred Reporting Items for Systematic Review and Meta-Analyses: The PRISMA Statement. PloS Med **6**(6): e1000097.

doi:10.1371/journal.pmed1000097

Mullen, P.E. et al., 1996. The long-term impact of the physical, emotional, and sexual abuse of children: a community study. *Child Abuse & Neglect* **20**(1): 7–21.

doi:[http://dx.doi.org/10.1016/0145-2134\(95\)00112-3](http://dx.doi.org/10.1016/0145-2134(95)00112-3)

Naughton, A. M. et al., 2013. Emotional, Behavioral, and Developmental Features

Indicative of Neglect or Emotional Abuse in Preschool Children: A Systematic

Review. *JAMA Pediatrics* **16**(8): 769-75, doi:10.101/jamapediatrics.2013.192

Okado, Y. & Azar, S.T., 2011. The Impact of Extreme Emotional Distance in the

Mother-Child Relationship on the Offspring's Future Risk of Maltreatment

Perpetration. *Journal of Family Violence* **26**(6): 439–452. doi:10.1007/s10896-

011-9378-0

Oliver, J.E., 1993. Intergenerational transmission of child abuse: rates, research, and

clinical implications. *The American journal of psychiatry* **150**(9): 1315–1324.

Pereira, J. et al., 2012. Parenting stress mediates between maternal maltreatment

history and maternal sensitivity in a community sample. *Child Abuse & Neglect*

36(5): 433–7. doi:10.1016/j.chiabu.2012.01.006

Riggs, S.A., 2010. Childhood Emotional Abuse and the Attachment System Across

- the Life Cycle: What Theory and Research Tell Us. *Journal of Aggression Maltreatment Trauma* **19**(1): 5–51. doi:10.1080/10926770903475968
- Scottish Intercollegiate Guidelines Network, 2011. *SIGN 50: A guideline developer's handbook*. Retrieved 15th January 2013 from <http://www.sign.ac.uk/pdf/sign50.pdf>
- Siddiqui, A., Haglöf, B. & Eisemann., 2010. Own memories of upbringing as a determinant of prenatal attachment in expectant women. *Journal of Reproductive and Infant Psychology* **18**(1): 37–41. doi: 10.1080/02646830050001690
- Thornberry, T.P., Knight, K.E. & Lovegrove, P.J., 2012. Does maltreatment beget maltreatment? A systematic review of the intergenerational literature. *Trauma, violence & abuse* **13**(3): 135–52.
- Vissing, Y. M., Straus, M.A., Gelles, R.J. & Harrop, J.W., 1991. Verbal aggression by parents and problems of children. *Child Abuse & Neglect* **15**(3): 223–238. doi:10.1016/0145-2134(91)90067-N
- Wright, M., 2007. The long-term impact of emotional abuse in childhood: Identifying mediating and moderating processes. *Journal of Emotional Abuse* **7**(2): 1–8.
- Zalewski, M. et al., 2013. Role of maternal childhood trauma on parenting among depressed mothers of psychiatrically ill children. *Depression and anxiety* **30**(9): 792–9. doi:10.1002/da.22116
- Zuravin, S.J. & Fontanella, C., 1999. Parenting behaviors and perceived parenting competence of child sexual abuse survivors. *Child abuse & neglect* **23**(7): 623–

32. doi:10.1016/S0145-2134(99)00045-9

Do early maladaptive schemas mediate the relationship between childhood emotional abuse/neglect and maternal attributions of controllability in difficult child care-giving interactions?

Abstract

The relationship between early experiences, such as neglect and abuse, and subsequent deficits in intra- and interpersonal domains, including parenting, is increasingly recognised. Previous research has indicated that childhood abuse is associated with maternal attributions of low perceived control over failure (PCF) in difficult child care-giving situations. Low PCF has also been linked to increased child maltreatment potential. This paper sought to explore whether early maladaptive schemas (EMSs) mediate the relationship between childhood emotional abuse (CEA) and/or emotional neglect (CEN) and maternal attributions of PCF. Community dwelling mothers (N = 111) completed self-report questionnaires relating to childhood maltreatment experiences, EMSs, parental attributions and depression. Multiple mediation analyses using bias-corrected bootstrapping were carried out. Significant relationships were found between maternal CEA/CEN and EMSs and between maternal CEN and PCF, but not between maternal CEA and PCF. We also found a significant indirect effect of the EMS Social Isolation/Alienation in the relationship between maternal CEN and PCF, but not maternal CEA and PCF. However, this was in the opposite direction to our prediction. The implications of these results are discussed in the context of current research.

Key words

Emotional abuse, emotional neglect, EMS, maternal attributions.

Introduction

The experience of childhood abuse and neglect is a significant risk factor for a range of pervasive negative intra- and interpersonal difficulties which can impact on the individual through the lifespan (Newcomb & Locke, 2001; Polusny & Follette, 1995). While the detrimental impact of childhood physical and sexual abuse has been consistently demonstrated (Kaplan, Pelcovitz, & Labruna, 1999; Polusny & Foulette, 1995), there has been less focus on the consequences of emotional abuse and emotional neglect. This, however, is an area which is gathering increasing attention as our knowledge of both the prevalence and negative consequences of these early experiences increases.

Although childhood emotional abuse (CEA) and emotional neglect (CEN) frequently co-occur with other forms of abuse, such as physical abuse (Claussen & Crittenden, 1991), research has indicated that they also occur in isolation and have specific deleterious consequences associated with them for the child's social and emotional functioning (e.g. Abramson & Alloy, 2004; Brassard & Donovan, 2006; Gibb, 2002; Sackett & Saunders, 1999). Some researchers have indicated that these types of child maltreatment may form a significant component of other types of abuse and that it may in fact be the emotionally harmful component of these experiences that is particularly damaging for the child (see Binggeli, Hart, & Brassard, 2001, for a review of the literature). This is particularly concerning given that CEA/CEN are regarded as being the most commonly occurring types of maltreatment experienced by children (Kaplan, Pelcovitz, & Labruna, 1999, Straus & Field, 2003).

Early experiences of CEA/CEN have also been demonstrated to translate into a range of adverse outcomes in adulthood, including low self-esteem (Sackett & Saunders, 1999), depression (Rich, Gingerich, & Rosen, 1997; Mullen, Martin, Anderson, Romans, & Herbison, 1996), suicidality (Briere & Runtz, 1988), future exposure to trauma (Spertus, Yehuda, Wong, Halligan, & Seremetis, 2003), interpersonal conflict (Messman-Moore & Coates, 2007), and difficulties in subsequent parenting roles (e.g. Bailey, Deoliveira, Wolfe, Evans, & Hartwick., 2012; Zalewski, Cyranowski, Cheng, & Swartz, 2013). A number of mechanisms have been proposed to explain the relationship between early maltreatment experiences and subsequent difficulties in adult functioning (see Newcomb & Locke, 2001, for a review). Within these, the influence of early attachment relationships on the development of internal working models (IWMs) of the self and others' may be of particular relevance. This perspective highlights the role of the early caregiver-child attachment relationship in creating a model for future relationships and the development of IWMs based on these transactional experiences (Bowlby, 1979; Bretherton & Munholland, 2008; Cicchetti & Toth, 2005). IWMs are of particular importance as they appear to influence the ways in which individuals react to and perceive themselves, others and the world. Within the context of the intergenerational transmission of childhood maltreatment, this perspective may be of particular utility in understanding the pathways from these early experiences to subsequent second-generation parenting deficits.

The impact of childhood maltreatment on parenting

Evidence exists of an association between experience of childhood maltreatment and a range of negative parenting outcomes, including the use of less effective parenting styles, role reversal and increased parenting stress (Alexander, Teti, & Anderson, 2000; Banyard, 1997; Pereira et al., 2012),

As discussed above, attachment theory may provide a useful explanatory framework within which to understand the intergenerational transmission of parenting deficits. Interactional experiences in which the caregiver is consistently unresponsive, unpredictable or hostile are proposed to lead to internal representations of the self as unworthy and unlovable and others as unpredictable, unreceptive and untrustworthy (Riggs, 2010; Simard, Moss, & Pascuzzo, 2011). Young, Klosko and Weishaar (2003) implicate early relational experiences such as these in the formation of early maladaptive schemas (EMSs), which are defined as rigid and inflexible information processing structures, comprised of emotions, cognitions and memories and which have a key role in determining the way in which the individual responds in both intra- and interpersonal contexts (Atalar et al., 2013; Gib, 2002; Messman-Moore & Coates, 2007).

Young and colleagues (2003) suggest that abuse and neglect may lead to the development of particular EMSs within the *Disconnection and Rejection* domain (see Table 4). These schemas are thought to have the most detrimental impact on the development and maintenance of subsequent relationships as a result of fears of abandonment, abuse or rejection by others, or beliefs that others are untrustworthy or

that one is defective (Atalar et al., 2013; Young et al., 2003).

Table 4: *Description of EMSs within the disconnection/rejection domain (Young et al., 2003)*

Disconnection/Rejection domain EMSs	
Emotional Deprivation (ED)	The expectation that one's desire for emotional connection will not be adequately fulfilled.
Abandonment (A)	The perceived instability of one's connection to significant others.
Mistrust (M)	The expectation that, given the opportunity, others will use them for their own selfish ends. For example, they will abuse, hurt, humiliate, lie to, cheat, or manipulate them.
Defectiveness / Unlovability (D/U)	The feeling that one is flawed, bad, inferior, or worthless and that they would be unlovable if this was exposed.
Social Isolation / Alienation (SI/A)	The feeling of being different and isolated from others and not fitting into the wider world or feeling part of a group.

Research has provided support for this link, with a range of early maladaptive schemas such as mistrust and abuse, defectiveness and shame, emotional deprivation and social isolation being found to be related to experiences of emotional abuse and neglect and to greater levels of adult interpersonal conflict (Carr & Francis, 2010; Messman-Moore & Coates, 2007). This indicates that the impact of CEA on

subsequent interpersonal functioning, including parenting, may be a function of the way in which the individual internalises aspects of childhood relational experiences in the form of EMSs.

Internal working models which perceive others' as abusive or neglectful and the self as vulnerable are therefore believed to translate into parenting deficits through impairments in interpersonal competence, affect regulation and an increase in negative attributions about others' behaviour (Bugental, Johnston, New, & Silvester, 1998; Miller-Perrin & Perrin, 1999; Newcomb & Locke, 2007).

Attributions, in particular, are conceptually linked to EMSs as they are believed to be derived from early experiences and accessed unconsciously in response to specific parent-child interactional patterns (Bugental & Happaney, 2004; Bugental & Shennum, 2002). The explanations that people derive for unpleasant events, such as child misbehaviour, and their response to these events are therefore proposed to be based on these EMSs and the resulting attributions which are invoked (Bugental & Happaney, 2004; Slep & O'Leary, 1998).

Within the context of the parent-child relationship, attributions about the perceived controllability of events may be of particular importance (Bugental, Blue, & Cruzcosa, 1989; Bugental & Happaney, 2004). Controllability in this context refers to the perceived balance of power which parents identify in the parent-child relationship. Parental perceptions of the child as having more power in the relationship, and a focus on power dynamics in parent-child interactions have been associated with increased negative reactions towards offspring in the context of

challenging care-giving interactions (Bugental et al., 1989; Bugental & Happaney, 2004). This indicates that cognitive appraisals around lack of power within the parent-child relationship may be a risk factor for subsequent abusive or negative parenting strategies.

Low perceived control over failure (PCF) therefore represents a measure of 'negative reactivity' which is related to one's own maltreatment history and which is thought to be derived from working models of care-giving relationships (Bugental, 2011; Bugental & Shennum, 2002). This suggests that experience of childhood maltreatment may lead to the construction of relationship schemas which are consistent with one's own experience of powerlessness within relational contexts (Bugental & Shennum, 2002). Attributions about power within the parent-child relationship may therefore lead to negative interpretations of child misbehaviour and consequently to negative reactivity in response to these perceived challenges. An additional impact on maternal responses and affect may also arise as a result of the reciprocal role of child behaviour in response to these altered discipline strategies (Slep & O'Leary, 1998).

Although the research literature has highlighted the relationship between childhood maltreatment and parental attributions of child behaviour (see Bugental & Shennum, 2002), this has not been explored in the context of CEA/CEN. There is also a paucity of research in relation to the aetiological and mediational aspects of these pathways. A greater consideration of the determinants of attributions of low controllability in care-giving interactions is therefore important given the link

between dysfunctional or abusive parenting strategies and such cognitive appraisals (e.g. Bugental et al., 1989).

This study therefore explored whether EMSs mediated the relationship between CEA/CEN and PCF. We predicted that: (i) Greater self-report of CEA/CEN will be associated with greater endorsement of EMSs; (ii) Greater self-report of CEA/CEN will be associated with lower levels of PCF, and; (iii) EMSs within the disconnection/rejection domain will mediate the relationship between greater self-report of CEA/CEN and lower levels of PCF in care-giving interactions.

Method

Participants

Participants were recruited from 30 primary schools across five local education authorities in Scotland. Approximately 5,200 female caregivers were invited to take part. Of these, 117 participants, ranging in age from 26 to 51 years ($M = 39.4$ years; $SD = 5.8$ years) completed the relevant questionnaires.

The majority of the sample was educated to at least degree level (50%). Forty-four percent had received a lower level of education qualification (e.g. Higher, A-Level or HND) or an occupational qualification. Six percent of our sample reported no educational or occupational qualifications. Data concerning family income and ethnicity were not collected. The schools recruited from covered a mixed demographic, from affluent to deprived and urban to rural. Participants reported the age of their eldest child ($M = 10.1$ years; $SD = 4.9$ years).

Inclusion criteria in this study were: (i) mothers who were aged at least 18 years at the time of their first child's birth, and; (ii) mothers who had at least one child within the 4- 12 years age range. Our exclusion criterion was: (i) Maternal reported self or child physical or learning disability. Two of our sample met our exclusion criteria and were therefore excluded from our final data analyses. Our final sample size was composed of 115 primary female caregivers ($M = 39.4$ years; $SD = 5.8$ years).

Measures

Demographic Inventory. Participants completed a brief demographic inventory (Appendix 7). This provided a measure of maternal age, age of the eldest child, maternal level of education (Office of National Statistics, 2005) and whether either the caregiver or child had a physical or learning disability.

The Young Schema Questionnaire – Short Form Revised (YSQ-S3; Young, 2005). The Young Schema Questionnaire is a 90-item self-report questionnaire which measures for 18 primary maladaptive schemas. Respondents are asked to rate items on a 6-point Likert scale from 1 (completely untrue of me) to 6 (describes me perfectly). Sample items include “For much of my life I haven’t felt that I am special to someone”. The 18 early maladaptive schemas (e.g. Abandonment/Instability) can be grouped into five domains, (i.e. *Disconnection & rejection; Impaired autonomy and performance; Impaired limits; Other-directedness; Over-vigilance and inhibition*) (Young, Klosko, & Weishaar, 2003).

Our study focussed on the five EMSs within the *disconnection and rejection* domain only as previous research has highlighted their relationship with early maltreatment experiences (e.g. Carr & Francis, 2010). Hawke and Provencher (2002) also recommend utilising EMSs which are guided by theory rather than a reliance on domain scores due to the failure of the five-factor structure of the YSQ-S3 to be reproduced via confirmatory or exploratory factor analysis. Adequate internal consistency (alpha coefficients range .71 - .93) has been demonstrated for the primary subscales (Glaser, Campbell, Calhoun, Bates, & Petrocelli, 2002). Each

schema is comprised of five items and the mean score across all five items is calculated to determine each schema score.

Childhood Trauma Questionnaire (CTQ-SF; Bernstein & Fink, 1998; Bernstein et al., 2003). The Childhood Trauma Questionnaire is a 28-item self-report questionnaire which measures for the incidence of five categories of maltreatment experienced during childhood or adolescence: emotional, physical and sexual abuse, and emotional and physical neglect. Respondents are asked to reflect on their experience of different types of maltreatment while they were growing up. Each item is rated for frequency on a 5-point Likert scale from “never true” to “very often true”. The CTQ has shown good internal and test-retest reliability and evidence supports its construct, convergent and discriminative validity (Bernstein & Fink, 1998; Bernstein et al., 2003). This study utilised the Emotional Abuse (EA; e.g., “I thought my parents wished I had never been born”) and the reverse-scored Emotional Neglect (EN; e.g., “I felt loved”) subscales to examine respondent’s experience of childhood emotional abuse and/or neglect.

The Beck Depression Inventory-II (Beck, Steer, & Brown, 1996). The Beck Depression Inventory is a 21-item self-report measure of depression. Respondents are asked to identify which of four possible responses within each of the twenty-one statement groups best matches their experience over the previous two weeks. Responses are scored against a four-point Likert scale. The BDI has demonstrated high internal consistency, validity and reliability and is routinely used in clinical practice (e.g., Beck, Steer, & Carbin, 1988).

Parental Attributions Test (PAT; Bugental & Shennum, 1984; Bugental & Happaney, 2004). The Parental Attributions Test is a measure of parental attributions about the degree of control or influence which a child has relative to an adult in a specific care-giving interaction. Although the PAT includes both a positive and negative behaviour scale, Bugental and Happaney (2004) have reported that the positive behaviour scale is unreliable and recommend that it is used for exploratory purposes only. The present study used items from the negative scale only.

The PAT asks respondents to read through a short vignette in which they imagine a care-giving scenario where they are responsible for the care of a neighbour's child and it does not go well. They are then asked to rate a series of possible causes of care-giving failure (e.g. "whether you used the wrong approach for this child") on a 7-point scale ranging from 1 (not at all important) to 7 (very important). Assigning high importance to self-controllable factors and low importance to self-uncontrollable factors indicates attributions of high adult-control over failure (ACF). Assigning high importance to child-controllable factors and low importance to child-uncontrollable factors indicates attributions of high control to children over failure (CCF). Bugental (2011) recommends use of a continuous perceived control over failure (PCF) variable rather than categorising participants into High and Low PCF. This variable is calculated by subtracting the mean of the CCF score from the mean of the ACF score. Low PCF indicates attributions of being personally unable to control care-giving failures and, conversely, of children as having greater responsibility for failed care-giving situations. The PAT has

demonstrated good construct, convergent, and divergent validity and test-retest reliability (Bugental & Shennum, 2002).

Procedure

Ethical approval was received from the Clinical Psychology Ethics Committee at the University of Edinburgh (Appendix 8). Approval to contact Primary School Head Teachers was granted by the head of education from five local education authorities in Scotland (Appendix 10 - 14). Following approval, head teachers were contacted and information regarding the study and the role of participating school's was outlined.

Schools which agreed to take part were visited by the primary researcher and participant information letters were disseminated by office personnel to the parents of all children between four years and twelve years of age within the school (Appendix 4). All letters were disseminated via bag-drop and addressed to the 'primary female caregiver'.

Those who wished to take part were invited to collect a 'Study Pack' from their child's school reception area. Study packs contained a consent form (Appendix 5), guide to taking part (Appendix 6), the six questionnaires, and a return envelope. Participants were asked to complete the enclosed questionnaires and to return them in the enclosed envelope to a study return box which was placed in the school's reception area. Completed questionnaires were collected approximately four weeks later.

Required sample size

Two methods of sample size calculation to detect a medium effect were undertaken, giving sample sizes of 116 and 114 respectively (Fritz & Mackinnon, 2007; Green, 1991). This would rely on a medium effect size being observed between experience of CEA/CEN and EMS scores, and a small-medium effect size being observed between EMS scores and PCF score.

Preliminary analyses

Missing data analysis was carried out using Little's Missing Completely at Random Test (MCAR; Little & Rubin, 1987). This demonstrated that 1.8% of responses to all items were missing and that these were missing at random. Missing values were imputed using the Expectation-Maximization approach.

Data across all measures was found to be positively skewed and a number of variables also showed significant kurtosis. The Shapiro-Wilk test and the Kolmogorov-Smirnov test confirmed that data were not normally distributed. Given our relatively large sample size ($n = >100$), it was considered unlikely that our skewed data would deviate enough from normality to substantially affect our analysis (Tabachnick & Fidell, 2014). We therefore used our untransformed data in our analyses.

Preliminary analyses for multiple regressions were carried out to determine the suitability of our data for mediation analysis. These included checks for outliers, normality of variance, linearity and lack of multicollinearity. Multicollinearity was

examined through the variance inflation factor (VIF), which should normally be below 10. Multicollinearity was not found. Outliers were identified via Mahalanobis distance ($p < 0.05$). Outliers in our data ($N = 4$) were removed from further analyses.

Pearson's correlation analyses were conducted to determine the interrelationships between CEA and CEN, PCF score, EMSs and depression (BDI) scores (see Table 6). Two multiple mediation analyses, using Hayes' (2013) 'PROCESS' macro in SPSS, were initially carried out with maternal depression and maternal educational attainment entered as covariates. However covariates were removed from our final analyses to increase power as neither was found to predict PCF score. Previous research has also found that scores on the PAT are unrelated to depression (see Bugental, 2011). The predictor variable in the two models was either the CEA or CEN score. The outcome variable was the PCF score. We investigated whether EMSs within the disconnection/rejection domain of the YSQ (see Table 4) mediated the relationship between CEA/CEN and PCF score.

Results

In line with recommendations by Bernstein & Fink (1998), participants were considered to meet criteria for a history of CEA or CEN if they scored within the 'moderate-severe' or 'severe-extreme' categories on the Emotional Abuse subscale (>13) or Emotional Neglect subscale (>15) of the CTQ. Twenty-six participants were therefore considered to have a history of CEA (23%) and thirty-one participants a history of CEN (28%) (see Table 5).

Table 5: *Number and percentage (%) of participants within each CTQ severity category*

Form of emotional maltreatment	None-Minimal	Low-Moderate	Moderate-Severe	Severe-Extreme
Emotional Abuse (CEA)	64 (58%)	21 (19%)	11 (10%)	15 (13%)
Emotional Neglect (CEN)	60 (54%)	20 (18%)	9 (8%)	22 (20%)
CEA: None-Minimal = 5-8; Low-Moderate = 9-12; Moderate-Severe = 13-15; Severe-Extreme = 16+				
CEN: None-Minimal = 5-9; Low-Moderate = 10-14; Moderate-Severe = 15-17; Severe-Extreme = 18+				

Relationships between history of CEA/CEN, EMSs, PCF score and depression scores

Intercorrelations between the variables indicated above are presented in Table 6. CEA was positively correlated with each of the early maladaptive schemas (YSQ-ED, YSQ-A, YSQ-M, YSQ-SI/A, YSQ-D/U) ($r_s = .558; .522; .618; .549$ and $.664$ respectively, $p < .01$) and with BDI scores ($r_s = .575$, $p < .01$). CEN was also positively correlated with each of the EMSs (YSQ-ED, YSQ-A, YSQ-M, YSQ-SI/A, YSQ-D/U) ($r_s = .593; .472; .553; .619$ and $.556$ respectively, $p < .01$) and with BDI ($r_s = .497$, $p < .01$). BDI score was also positively correlated with each of the early maladaptive schemas. Maternal PCF did not correlate significantly with any of the variables. The relationship between maternal CEN and PCF just failed to reach significance ($p = .055$). It is important to note that a non-significant relationship between our independent and dependent variables does not rule out that our IV may exert an indirect effect on our DV through our mediators (Hayes, 2009; Rucker, Preacher, Tormala, & Petty, 2011). We therefore proceeded to test this.

Table 6: *Bivariate correlations among CEA, CEN, EMSs, maternal PCF and BDI score*

	CEA	CEN	PCF	YSQ-ED	YSQ-A	YSQ-M	YSQ-SI/A	YSQ-D/U	BDI
CEA	-	.794**	-.133	.558**	.522**	.618**	.549**	.664**	.575**
CEN		-	-1.53	.593**	.472**	.553**	.619**	.556**	.497**
PCF			-	-.057	.018	-.018	.076	-.082	-.123
YSQ-ED				-	.665**	.651**	.687**	.671**	.648**
YSQ-A					-	.776**	.731**	.752**	.638**
YSQ-M						-	.760**	.816**	.776**
YSQ-SI/A							-	.711**	.655**
YSQ-D/U								-	.772**
BDI									-
Mean	9.49	10.63	0.56	1.80	2.1	2.34	2.33	1.78	12.42
SD	4.84	5.63	0.81	1.16	1.18	1.24	1.30	0.99	11.55
Range	5-25	5-23	-2 – 2.83	5-28	5-30	5-30	5-30	5-26	0-51

CEA, childhood emotional abuse (CTQ); CEN, childhood emotional neglect (CTQ); PCF, perceived control over failure score (Parent

Attribution Test), YSQ-ED, Emotional Deprivation (Young Schema Questionnaire), YSQ-A, Abandonment (Young Schema Questionnaire); YSQ-M, Mistrust (Young Schema Questionnaire), YSQ-SI/A, Social Isolation/Alienation (Young Schema Questionnaire), YSQ-D/U, Defectiveness/Unlovability (Young Schema Questionnaire), BDI, maternal depression score (Beck Depression Inventory-II); ** $p < 0.01$.

Multiple mediation analyses

We examined indirect and total effects via bootstrapping in two mediation models (with $n = 5000$ bootstrap resamples) (Preacher & Hayes, 2008). Our first model examined CEA as the predictor variable and the second examined CEN as the predictor variable. Bootstrapping is increasingly utilised within mediation analysis because it does not rely on a normal distribution, which is required for the casual steps approach (Baron & Kenny, 1986) and the Sobel test. Indirect effects were assessed through calculation of the 95% (bias-corrected) confidence intervals for the parameter estimates of the indirect effects; whereby an indirect effect is significant if the confidence intervals do not contain a zero.

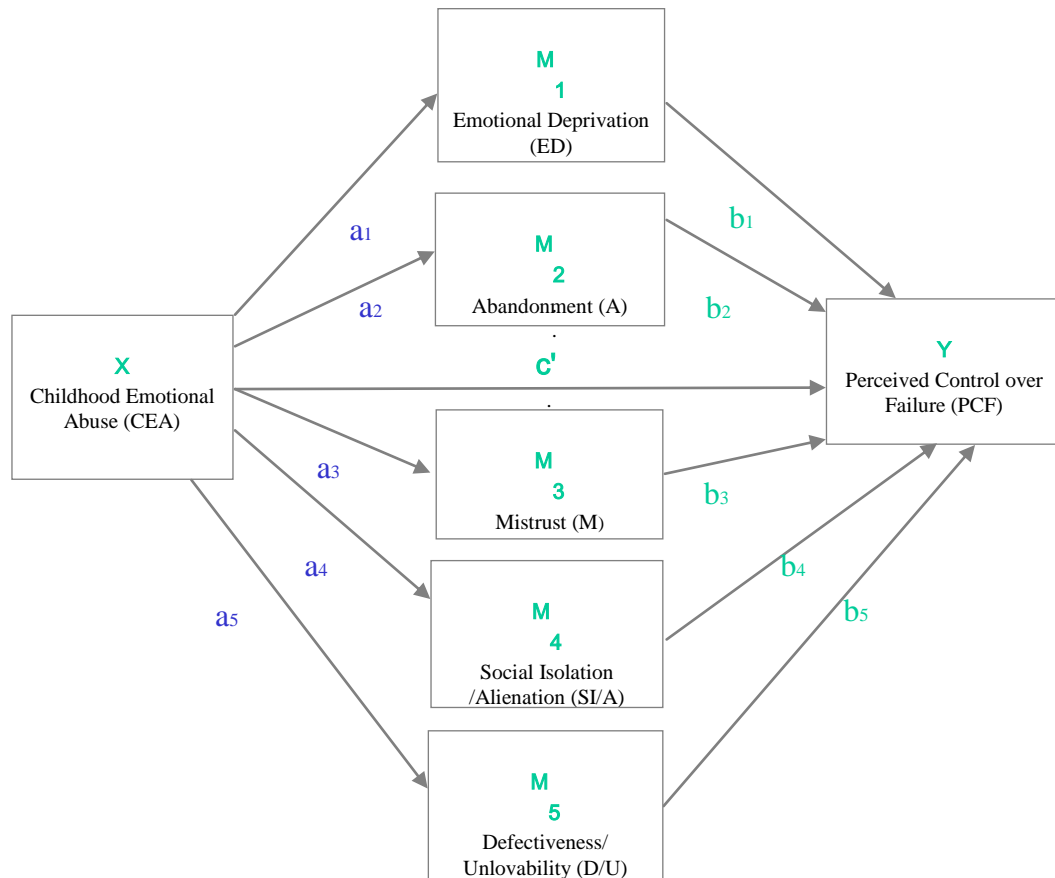
Mediation of EMSs in the relationship between CEA and maternal attributions of PCF in child care-giving situations.

In the first mediation analysis, we tested the hypothesis that EMSs within the 'disconnection and rejection' domain (Ms) would mediate the relationship between maternal CEA (X) and maternal attributions of PCF (Y) (see Fig 2).

As Table 7 illustrates, childhood experience of emotional abuse (CEA) was positively and significantly associated with all of the EMSs, but not with PCF score. CEA explained between 27.2% and 44.1% of the variance in EMSs. Controlling for CEA, none of our EMSs were significantly associated with maternal PCF score. There was also no evidence of a direct effect of CEA on PCF ($c' = -.028$, $p = .209$), or of an indirect effect via any of the EMSs.

Overall, our mediation model explained only 1.8% of the variance in PCF score, where $F(1, 109) = .1977$, $p = .163$. This suggests that other factors not included in this model are likely to have a larger effect on these relationships.

Figure 2. Multiple mediation model with CEA as the predictor variable



Mediation of EMSs in the relationship between CEN and maternal attributions of PCF in child care-giving situations.

In the second mediation analysis, we tested the hypothesis that EMSs within the 'disconnection and rejection' domain (Ms) would mediate the relationship between maternal CEN (X) and maternal attributions of PCF (Y) (see Fig 3).

Table 8 illustrates that CEN was positively and significantly associated with all of the EMSs. CEN explained between 22.3% and 38.3% of the variance in EMSs. We also found a direct effect of CEN on PCF score ($c' = -.038, p=.037$). Controlling for CEN, only one of our EMSs (Social Isolation/Alienation) was positively and significantly associated with maternal PCF score. The indirect effect (of X on Y) through SI/A was positive and significantly different from zero [95% CI (.039 - .452)]. Indirect effects were not found for the other four EMSs.

Overall, our mediation model explained only 2.3% of the variance in PCF score, where $F(1, 109) = 2.601, p = .110$. Again, this suggests that other factors not included in this model are likely to have a larger impact on these relationships.

Figure 3: Multiple mediation model with CEN as the predictor variable

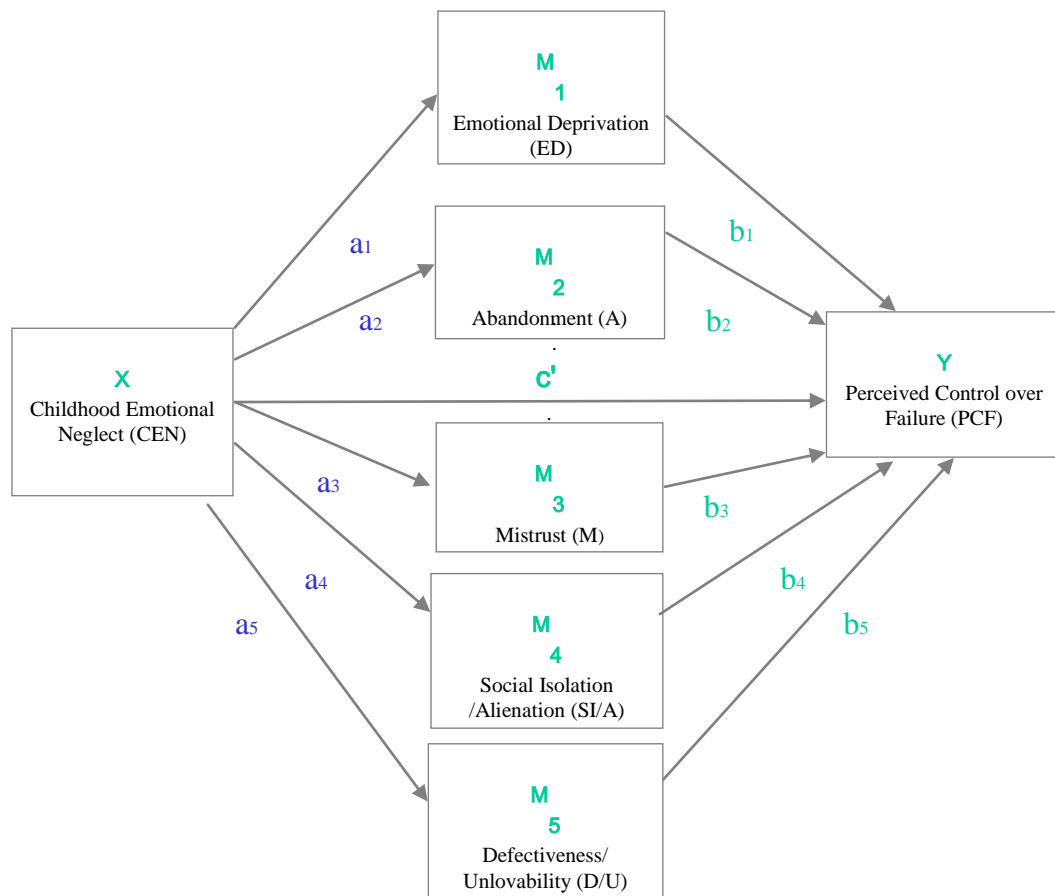


Table 7: *Effects within 'a paths', 'b paths', direct effects, indirect effects and BC CI's in the CEA model*

EMSs	Effect of CEA on		Effect of EMSs on PCF,		Direct effect of CEA		Indirect effect of		95% BC CI for	
	EMSs		controlling for CEA		on PCF		CEA on PCF		the indirect	
	(a paths)		(b paths)		(c' path)		through EMSs		effect	
	β	SE	β	SE	β	SE	β	SE		
Emotional Deprivation (ED)	.134	.019**	-.079	.100	-.028	.022	-.011	.021	-.055	.028
Abandonment (A)	.128	.020**	.062	.115	-.028	.022	.004	.015	-.017	.041
Mistrust (M)	.159	.019**	-.006	.125	-.028	.022	.001	.023	-.041	.049
Social Isolation/ Alienation (SI/A)	.148	.022**	.190	.102	-.028	.022	.028	.018	-.004	.066
Defectiveness / Unlovability (D/U)	.137	.015**	-.153	.152	-.028	.022	-.021	.020	-.060	.018

β : unstandardised coefficients; SE: Standard Error; BC CI: Bias-corrected Confidence Intervals; ** indicates significant at $p < .001$; *

indicates significant effect at $p < .05$; Bold indicates significant indirect effect.

Table 8: *Effects within 'a paths' and 'b paths', direct effects, indirect effects and BC CI's in the CEN model*

EMSs	Effect of CEN on		Effect of EMSs on PCF,		Direct effect of CEN		Indirect effect of		95% BC CI for	
	EMSs		controlling for CEN		on PCF		CEN on PCF		the indirect	
	(a paths)		(b paths)		(c' path)		through EMSs		effect	
	β	SE	β	SE	β	SE	β	SE		
Emotional Deprivation (ED)	.123	.016**	-.045	.101	-.038	.018*	-.006	.019	-.046	.028
Abandonment (A)	.099	.018**	.041	.114	-.038	.018*	.004	.011	-.015	.031
Mistrust (M)	.123	.018**	.003	.122	-.038	.018*	.000	.018	-.033	.041
Social Isolation/ Alienation (SI/A)	.143	.017**	.245	.104*	-.038	.018*	.035	.017	.002	.071
Defectiveness / Unlovability (D/U)	.098	.014**	-.177	.144	-.038	.018*	-.017	.014	-.046	.009

β : unstandardised coefficients; SE: Standard Error; BC CI: Bias-corrected Confidence Intervals; ** indicates significant at $p < .001$; *

indicates significant effect at $p < .05$; Bold indicates significant indirect effect.

Discussion

This study explored whether EMSs (Young et al., 2003; Young, 2005) mediated the relationship between CEA/CEN and maternal attributions of PCF in a hypothetical difficult child care-giving situation.

In line with previous research (e.g. Carr & Francis, 2010), and in support of our first hypothesis, maternal CEA and CEN were found to predict all five EMSs. This suggests that mothers who report childhood emotional maltreatment experiences are more likely to endorse schemas within the disconnection and rejection domain. Schemas within this domain impact on the way in which individual's interpret, process and respond to interpersonal events and have been found to be associated with difficulties in interpersonal relationships and avoidant personality disorder (Carr & Francis, 2010; Messman-Moore & Coates, 2007). The parent-child relationship can, at times, be characterised by interpersonal conflicts and disputes and it is therefore postulated that EMS will also impact on the way in which parents interpret and respond to their child(ren)'s behaviour.

Partial support was found for our second hypothesis, with a significant direct relationship observed between maternal CEN and PCF, controlling for EMSs, but not between maternal CEA and PCF. Results indicate that an increase in self-reported maternal CEN is associated with a decrease in PCF score, adding to the literature on the relationship between early maltreatment experiences and attributions of low perceived control over failure. The size of this effect however was small and caution is therefore recommended in the interpretation of these results.

Experience of CEA, was not found to predict PCF score, suggesting a differential effect of CEN as opposed to CEA on the development of these attributions. These results contrast with previous research, which has highlighted the relationship between CEA and a range of parenting deficits, including increased propensity towards abuse (Bert, Guner, & Lanzi, 2009) and dysfunctional interactions (Lang, Garstein, Rodgers, & Lebeck, 2010).

It is possible therefore that the outcomes observed are a function of our particular sample, or are related to our utilisation of a measure of attributions based on a fictional child. Reflections based on a hypothetical interaction of this kind may invoke different attributions than would be observed in relation to one's own offspring, due to the vast network of experiences and memories which would likely be recalled in the context of a familiar relationship. Findings from a study by Malone and colleagues (2010), that experience of emotional maltreatment does not differentiate maternal pre-natal representations of their unborn child, compared to mothers with no reported maltreatment experience, may indicate a similar response pattern. However, it is important to consider that the experience of emotional abuse may lead to particular maladaptive coping strategies centred on control within interpersonal relationships (see Riggs, 2010) and that these findings may reflect a self-perceived responsibility for management of interpersonal challenges.

Our results also demonstrated that only the EMS 'Social Isolation/Alienation' had a significant effect on PCF score once CEN had been controlled for, but that this

was in the opposite direction to our prediction. Again, this may be due to activation of a maladaptive controlling coping strategy within this context. Mothers' who self-identify as socially isolated may perceive difficult child care-giving situations involving a neighbour's child as more stressful and may therefore attribute greater self-responsibility to the determination of outcomes. The maladaptive schemas 'Emotional Deprivation', 'Abandonment', 'Mistrust', and 'Defectiveness' did not significantly predict PCF score once CEN had been controlled for. Therefore, despite being conceptually linked, (Bugental & Happaney, 2004), the majority of EMSs within the disconnection and rejection domain did not predict attributions of PCF, out-with the direct effect of CEN.

Partial support was also found for our final hypothesis, with a significant indirect effect of the EMS 'Social Isolation/Alienation' on the relationship between maternal CEN and PCF, but not between CEA and PCF. Again, however, this was not in the direction predicted; with a positive indirect effect observed. These results suggest that while the experience of maternal CEN is associated with attributions of low PCF, endorsement of the SI/A schema is associated with a positive relationship between CEN and PCF; such that greater levels of self-reported CEN are associated with higher PCF, via SI/A.

As discussed above, our results suggest that CEN may have a differential effect on outcomes than CEA. This may be due to the way in which CEN represents a failure to account for the child's emotional needs, such that early working models of the self as worthless, and others as unable to meet one's needs, are developed. In

this context, social isolation/alienation may be related to negative self-perceptions, or a reactive tendency towards self-sufficiency. Difficult interpersonal situations may lead to an activation of these IWM's and to increased attributions of self-responsibility derived from these negative self perceptions. Indeed, Cole and Putnam (1993) highlighted that child maltreatment experiences, such as sexual abuse, may compromise the development of a positive sense of self and it may be that similar pathways operate in relation to CEN.

The experience of childhood abuse and neglect is also frequently associated with an increase in controlling behaviour towards the caregiver (Main & Cassidy, 1988). These behaviours are understood as a response designed to be adaptive in the face of repeated experiences of caregivers being unable to meet one's needs (Hughes, 2006). As discussed above, an increase in PCF may therefore reflect an increase in self-perceived responsibility for the determination of interpersonal outcomes. The care of a neighbour's child may represent an additional stressor for mothers' who perceive themselves as socially isolated, and this may translate into an increased drive towards control of outcomes, and consequently an increase in perceived control.

The relationship between emotional maltreatment experiences and social isolation found in our study may therefore be reflective of both active withdrawal from others, due to their perceived inability to meet one's needs, and a passive withdrawal, resulting from damage to one's sense of self or to a failure to develop the emotional and social competencies necessary to manage interpersonal dynamics

(Elliott, Cunningham, Linder, Colangelo, & Gross, 2005). To our awareness, previous research has not explored the relationship between attributions of greater PCF and negative self-perceptions or increased self-sufficiency and we are therefore tentative in our discussion of this possible relationship. It is also important to note that, if negative self-perceptions were reflected by the Social Isolation schema then we might also have expected to see a similar pattern in relation to the Defectiveness/Unlovability schema, which taps into these in a more explicit way.

In considering these results, it is important to note that both mediation models explained only a very small proportion of the variance in PCF score. The effect size observed between SI/A and PCF in the context of CEN was also small. While this may be related to our utilisation of a non-clinical sample, it is interesting to note that participants self-reported relatively high levels of CEA/CEN (see Baker & Maiorino, 2010 for population prevalence statistics). These observations suggest that the relationship between CEA/CEN and PCF may be contrary to that demonstrated with respect to physical abuse (Bugental & Shennum, 2002). This may be a consequence of distinct coping responses developed in response to different experiences. A further exploration of these relationships in the context of a larger sample size would therefore be recommended.

Strengths and limitations of the study

A particular strength of this study is its attempt to add to the small body of research exploring the intergenerational impact of childhood psychological maltreatment. Previous research has indicated a relationship between childhood

maltreatment (Bugental & Shennum, 2002) and attributions of PCF, but, to the best of our knowledge, this is the first study to explore this relationship in the context of CEA/CEN. A second strength is in our exploration of the pathways from childhood maltreatment to negative outcomes. This is important as it increases our knowledge of specific risk and protective factors and facilitates the development of appropriate psychotherapeutic interventions.

Several limitations are acknowledged. Firstly, our recruitment strategy may have resulted in a self-selected participant pool. Indeed, it is noted that the majority (50%) of our sample were educated to Degree level. As discussed above, self-report of emotional abuse/neglect was also higher than is routinely found in community samples (see Baker & Maiorino, 2010). These observations may indicate that a proportion of mothers' participated in this research due to a personal or academic interest in the subject. Both factors reduce the generalisability of these findings to the wider population. Our relatively small sample size (N=111) may also have impacted the power of analyses and potentially obscured some findings.

Secondly, the PAT presents a hypothetical care-giving scenario based on the care of a neighbour's child rather than one's own. It is therefore unclear to what extent mother's scores would reflect perceived controllability over care-giving situations involving their own child. We are also not able to infer to what extent self-reported attributions in this hypothetical scenario would reflect those invoked within a real-life context.

Thirdly, our study focussed on maternal CEA/CEN and did not account or control for other abuse/neglect experiences. We acknowledge that maltreatment experiences are commonly multi-type in nature, but our focus on CEA/CEN resulted from awareness of the way these experiences often underpin other forms of abuse/neglect and the specific deleterious consequences associated with them. We also acknowledge that our study did not factor in individual, familial or community risk and protective factors in relation to maltreatment experiences and failed to integrate our depression variable within our analysis. Lack of inclusion of important covariates within our analysis limits our ability to establish a relationship between our predictor and outcome variables. This is particularly important given the significant positive correlation between our maternal depression score and our EMS scores. Controlling for this would have increased our knowledge about the relationship between maternal childhood maltreatment experiences and EMSs as it may be that low mood impacts on the way in which situations are interpreted and responded to.

Our use of self-report methodology also increased the risk of confounding results through reporting biases (Brewin, Andrews, & Gottlib, 1993). It would be beneficial for future studies to make use of observer report data and to measure factors such as the child's age and temperament, the frequency of abuse/neglect and the relationship to the perpetrator, as these may confer additional risk or protective factors. Finally, it is important to note that although the conceptualisation of our mediation model suggests causal pathways (i.e. CEA/CEN leads to EMSs which lead to attributions of PCF), cross-sectional data can only infer correlational relationships

rather than causality and our results should be interpreted with this in mind.

Clinical implications and future directions

Increasing awareness of the relational context in which psychological maltreatment occurs suggests the importance of interventions that go beyond a crisis orientation to those that work with parents and children proactively to develop relationships which are developmentally sensitive, and to build on protective factors. Psychotherapeutic approaches may have particular utility in working with parents whose own early life experiences influence the way in which they perceive and respond to their children's behaviour (see McMillan et al., 2008). Home visitation programs, in particular, have demonstrated positive outcomes in terms of improvements in the parent-child relationship and in child behaviour for families identified as being at risk for maltreatment perpetration (e.g. Olds & Kitzman, 1993; Sanders et al., 2004). This suggests the importance of approaches that empower parents to develop parenting skills in a context of support and guidance.

Our findings indicate that interventions with parents who have experienced childhood emotional maltreatment may also benefit from the targeting of schemas within the disconnection/rejection domain, as they demonstrate significant relationships with these early experiences. Young and colleagues (2003) indicate that schema-focussed therapy may be of value in working with maladaptive schemas through the combination of experiential and interpersonal techniques, which suggests the utility of this approach within routine clinical practice.

Conclusions

In line with previous research, our findings indicate that maternal CEA/CEN is related to EMSs within the Disconnection/Rejection domain of the YSQ. As Young (2003) emphasises, the “toxic” nature of early abusive experiences may lead to distorted perceptions of oneself, others, and the world, and it is through this lens that interpersonal situations may be interpreted and behaviours determined. In our exploration of the relationship between CEA/CEN and PCF, via EMSs, we found partial support for this explanatory framework. Our results demonstrated that CEN was directly related to maternal attributions of Low PCF, but that contrary to our prediction, a significant positive indirect relationship was observed between CEN and PCF through SI/A. We consider whether the relationship between CEA/CEN and PCF may reflect a distinct set of coping behaviours developed in response to emotional maltreatment experiences; a need to be self-sufficient, and in control, due to the perceived inability of others’ to meet one’s needs. Limitations within the research and the small effect size observed however necessitate caution in the interpretation of these relationships and we are careful to highlight the non-directional nature of these relationships.

References

- Alexander, P. C., Teti, L., & Anderson, C. L. (2000). Childhood sexual abuse history and role reversal in parenting. *Child Abuse and Neglect*, 24, 829–838.
doi:10.1016/S0145-2134(00)00142-3
- Bailey, H. N., Deoliveira, C. A., Wolfe, V. V., Evans, E. M., & Hartwick, C. (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child abuse & neglect*, 36(3), 236–46. doi:10.1016/j.chiabu.2011.11.005
- Banyard, V. L. (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women's later parenting. *Child Abuse and Neglect*, 21, 1095–1107. doi:10.1016/S0145-2134(97)00068-9
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51, 1173–1182.
doi:10.1037/0022-3514.51.6.1173
- Baker, A. J. L., & Maiorino, E. (2010). Children and Youth Services Review Assessments of emotional abuse and neglect with the CTQ : Issues and estimates. *Children and Youth Services Review*, 32(5), 740–748.
doi:10.1016/j.childyouth.2010.01.011
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Manual for the Beck depression inventory-II. *San Antonio, TX: Psychological Corporation*, 1–82. Retrieved from

<http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Manual+for+the+Beck+depression+inventory-II#0>

Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77–100. doi:10.1016/0272-7358(88)90050-5

Bernstein, D. P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report*. San Antonio The Psychological Corporation. The Psychological Corporation.

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., ... Zule, W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, 27(2), 169–190. doi:10.1016/S0145-2134(02)00541-0

Bert, S. C., Guner, B. M., & Lanzi, R. G. (2009). The Influence of Maternal History of Abuse on Parenting Knowledge and Behavior. *Family relations*, 58(2), 176–187. doi:10.1111/j.1741-3729.2008.00545.x

Bowlby, J. (1979). *The breaking and making of affectional bonds*. London: Tavistock.

Brassard, M. R., Germaine, R., & Hart, S. N. (Eds.). (1987). *Psychological maltreatment of children and youth*. New York: Pergamon

Brassard, M. R., & Donovan, K. M. (2006). Defining psychological maltreatment. In M. Feerick, J. F. Knutson, Trickett, P. K., & Flanzer, S. (Eds.), *Child abuse and neglect*. Baltimore, MD: Brookes Publishing.

- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 102–127). New York: Guilford Press.
- Brewin, C.R., Andrews, B., & Gotlib, I.H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*, 113, 82-98.
- Binggeli, N. J., Hart, S. N., & Brassard, M. R. (2001). *Psychological maltreatment of children*. Thousand Oaks, CA: Sage Publications.
- Briere, J., & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child abuse neglect*, 12(3), 331–341. Retrieved from <http://elsevier.com>
- Bugental, D. B. (2011). Parent Attribution Test: Manual Revised 10/1/2011. Accessed from: <https://labs.psych.ucsb.edu/bugental/daphne/PARENT%20ATTRIBUTION%20TEST.manual.2011.pdf>, 24th March 2014.
- Bugental, D. B., Blue, J., Cruzcosa, M., Laboratories, B. T., & Hill, M. (1989). Perceived Control Over Caregiving Outcomes : Implications for Child Abuse. *Developmental Psychology*, 25(4), 532–539.
- Bugental, D. B., & Happaney, K. (2004). Predicting infant maltreatment in low-income families: the interactive effects of maternal attributions and child status at birth. *Developmental Psychology*, 40(2), 234-43.

- Bugental, D. B., Johnston, C., New, M., & Silvester, J. (1998). Measuring parental attributions: Conceptual and methodological issues. *Journal of Family Psychology, 12*(4), 459–480. doi:10.1037//0893-3200.12.4.459
- Bugental, D. B., & Shennum, W. A. (1984). “Difficult” children as elicitors and targets of adult communication patterns: an attributional-behavioral transactional analysis. *Monographs of the Society for Research in Child Development, 49*(1), 1–79. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/6749157>
- Bugental, D. B., & Shennum, W. A., (2002). Gender, power, and violence in the family. *Child Maltreatment* (special issue), 7, 56-64.
- Carr, S. N., & Francis, A. J. P. (2009). Do Early Maladaptive Schemas Mediate the Relationship Between Childhood Experiences and Avoidant Personality Disorder Features? A Preliminary Investigation in a Non-Clinical Sample. *Cognitive Therapy and Research, 34*(4), 343–358. doi:10.1007/s10608-009-9250-1
- Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual review of clinical psychology, 1*, 409–38. doi:10.1146/annurev.clinpsy.1.102803.144029
- Cole, P. M., & Putnam, F. W. (1992). Effect of incest on self and social functioning: a developmental psychopathology perspective. *Journal of consulting and clinical psychology, 60*, 174–184. doi:10.1037/0022-006X.60.2.174
- Cole, P. M., Woolger, C., Power, T. G., & Smith, K. D. (1992). Parenting difficulties among adult survivors of father-daughter incest. *Child abuse & neglect, 16*, 239–249. doi:10.1016/0145-2134(92)90031-L

- Elliott, G. C., Cunningham, S. M., Linder, M., Colangelo, M., & Gross, M. (2005). Child physical abuse and self-perceived social isolation among adolescents. *Journal of interpersonal violence*, 20(12), 1663–84.
doi:10.1177/0886260505281439
- Fritz, M. S., & Mackinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science : a journal of the American Psychological Society / APS*, 18, 233–239. doi:10.1111/j.1467-9280.2007.01882.x
- Glaser, B. A., Campbell, L. F., Calhoun, G. B., Bates, J. M., & Petrocelli, J. V. (2002). The early maladaptive schema questionnaire-short form: A construct validity study. *Measurement and Evaluation in Counseling and Development*, 35, 2–13.
- Hawke, L. D., & Provencher, M. D. (2012). The Canadian French Young Schema Questionnaire: Confirmatory factor analysis and validation in clinical and nonclinical samples. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 44(1), 40–49. doi:10.1037/a0026197
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*.
doi:10.1080/03637750903310360
- Hughes, D. A. (2006). *Building the bonds of attachment: Awakening love in deeply troubled children* (2nd Ed). Oxford: Rowman and Littlefield publishers.
- Gibb, B. E. (2002). Childhood maltreatment and negative cognitive styles: A quantitative and qualitative review. *Clinical Psychology Review*.
doi:10.1016/S0272-7358(01)00088-5

- Green, S. B. (1991). How Many Subjects Does It Take To Do A Regression Analysis. *Multivariate Behavioral Research*. doi:10.1207/s15327906mbr2603_7
- Kaplan, S. J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: a review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1214–1222. doi:10.1097/00004583-199910000-00009
- Little, R. J. A., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York: Wiley.
- Main, M., & Cassidy, J. (1988). Categories of response to reunion with the parent at age 6: Predictable from infant attachment classifications and stable over a 1-month period. *Developmental Psychology*. doi:10.1037/0012-1649.24.3.415
- McMillan, A. S., Barlow, J., Stewart-Brown, S. L., Carter, Y., Sidebotham, P., & Paul, M. (2008). Systematic review of interventions for the secondary prevention and treatment of emotional abuse of children by primary carers. Accessed from: <http://wrap.warwick.ac.uk/2906/> on 22/03/14
- Messman-Moore, T. L., & Coates, A. A. (2007). The Impact of Childhood Psychological Abuse on Adult Interpersonal Conflict. *Journal of Emotional Abuse*. doi:10.1300/J135v07n02_05
- Miller-Perrin, C. L., & Perrin, R. D. (1999). *Child maltreatment: an introduction*. Newbury Park, CA: Sage Publications.
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: a

community study. *Child abuse & neglect*, 20, 7–21.

doi:[http://dx.doi.org/10.1016/0145-2134\(95\)00112-3](http://dx.doi.org/10.1016/0145-2134(95)00112-3)

Newcomb, M. D., & Locke, T. F. (2001). Intergenerational cycle of maltreatment: A popular concept obscured by methodological limitations. *Child Abuse and Neglect*, 25, 1219–1240. doi:10.1016/S0145-2134(01)00267-8

Office for National Statistics (2005). *Harmonised Concept and Questions for Social Data Sources: Primary Standards*. Office for National Statistics, 3rd edition.

Accessed from:

http://www.surveynet.ac.uk/sqb/topics/education/sqb_education_schneider.pdf,
on 02/04/14

Olds, D. L., & Kitzman, H. (1993). Review of Research on Home Visiting for Pregnant Women and Parents of Young Children. *The Future of Children*, 3, pp. 53–92. doi:10.2307/1602543

Pereira, J., Vickers, K., Atkinson, L., Gonzalez, A., Wekerle, C., & Levitan, R. (2012). Parenting stress mediates between maternal maltreatment history and maternal sensitivity in a community sample. *Child Abuse and Neglect*, 36, 433–437. doi:10.1016/j.chiabu.2012.01.006

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40, 879–891. doi:10.3758/BRM.40.3.879

- Rich, D. J., Gingerich, K. J., & Rosen, L. A. (1997). Childhood Emotional Abuse and Associated Psychopathology in College Students. *Journal of College Student Psychotherapy*. doi:10.1300/J035v11n03_04
- Riggs, S. A. (2010). Childhood Emotional Abuse and the Attachment System Across the Life Cycle: What Theory and Research Tell Us. *Journal of Aggression, Maltreatment & Trauma*. doi:10.1080/10926770903475968
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation Analysis in Social Psychology: Current Practices and New Recommendations. *Social and Personality Psychology Compass*, 5, 359–371. doi:10.1111/j.1751-9004.2011.00355.x
- Sackett, L. A., & Saunders, D. G. (1999). The impact of different forms of psychological abuse on battered women. *Violence and victims*, 14, 105–117.
- Sanders, M. R., Pidgeon, A. M., Gravestock, F., Connors, M. D., Brown, S., & Young, R. W. (2004). Does parental attributional retraining and anger management enhance the effects of the Triple P-Positive Parenting Program with parents at risk of child maltreatment? *Behavior Therapy*, 35, 513–535. doi:10.1016/S0005-7894(04)80030-3
- Simard, V., Moss, E., & Pascuzzo, K. (2011). Early maladaptive schemas and child and adult attachment: a 15-year longitudinal study. *Psychology and psychotherapy*, 84, 349–66. doi:10.1111/j.2044-8341.2010.02009.x

- Slep, A. M. S., & O’Leary, S. G. (1998). The effects of maternal attributions on parenting: An experimental analysis. *Journal of Family Psychology*. doi:10.1037/0893-3200.12.2.234
- Spertus, I. L., Yehuda, R., Wong, C. M., Halligan, S., & Seremetis, S. V. (2003). Childhood emotional abuse and neglect as predictors of psychological and physical symptoms in women presenting to a primary care practice. *Child Abuse and Neglect*, 27, 1247–1258. doi:10.1016/j.chiabu.2003.05.001
- Straus, M. A., & Field, C. J. (2003). Psychological aggression by American parents: National data on prevalence, chronicity, and severity. *Journal of Marriage and Family*, 65, 795–808. doi:10.1111/j.1741-3737.2003.00795.x
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using Multivariate Statistics*. Pearson Education Ltd: Essex.
- Young, J.E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner’s guide*. New York: Guilford.
- Young, J. E. (2005). *Young Schema Questionnaire-Short Form 3 (YSQ-S3)*. New York: Schema Therapy Institute
- Zalewski, M., Cyranowski, J. M., Cheng, Y., & Swartz, H. a. (2013). Role of maternal childhood trauma on parenting among depressed mothers of psychiatrically ill children. *Depression and anxiety*, 30, 792–9. doi:10.1002/da.22116

Zuravin, S. J., & Fontanella, C. (1999). Parenting behaviors and perceived parenting competence of child sexual abuse survivors. *Child Abuse and Neglect*, 23, 623–632. doi:10.1016/S0145-2134(99)00045-9

Additional Methodology

Demographic Measure of Maternal Education

Maternal level of education was measured using a simple classificatory system which asked respondents to identify their highest level of educational attainment (see Appendix 7) and classified responses into: (1) Qualification at degree level or above; (2) Any other kind of qualification, or; (3) No qualification (Office of National Statistics, 2005).

Ethical implications

The participant information letter (Appendix 4) and consent form (Appendix 5) outlined details of the study and the voluntary nature of involvement in the study. Participants were made aware that they could choose to withdraw from the study and that their responses were anonymous. They were also informed that individual data would be compiled together with the total body of collected data prior to analysis and write up.

Given the sensitive nature of the information elicited, it was felt important to ensure that support was available to participants who might require this. Telephone helpline contact numbers were therefore provided (see Appendix 4 and 6) within the study materials for 'Child Line' and 'Breathing Space'. Participants were also advised to seek their general practitioner's (GP's) advice should they be adversely affected by their participation in the study.

References for complete portfolio

- Alexander, P. C., Teti, L., & Anderson, C. L. (2000). Childhood sexual abuse history and role reversal in parenting. *Child Abuse and Neglect*, 24, 829-838.
doi:10.1016/S0145-2134(00)00142-3
- Bailey, H. N., Deoliveira, C. A., Wolfe, V. V., Evans, E. M., & Hartwick, C. (2012). The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods. *Child Abuse & Neglect*, 36(3), 236–46. doi:10.1016/j.chiabu.2011.11.005
- Baker, A. J. L., & Maiorino, E. (2010). Children and youth services review assessments of emotional abuse and neglect with the CTQ : Issues and estimates. *Children and Youth Services Review*, 32(5), 740–748.
doi:10.1016/j.childyouth.2010.01.011
- Banyard, V. L. (1997). The impact of childhood sexual abuse and family functioning on four dimensions of women’s later parenting. *Child Abuse and Neglect*, 21, 1095–1107. doi:10.1016/S0145-2134(97)00068-9
- Barlow, J. & Schrader McMillan, A. (2010). *Safeguarding Children from Emotional Maltreatment: What Works*. London: Jessica Kingsley Publishers
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
doi:10.1037/0022-3514.51.6.1173
- Bavolek, S.J., & Keene, I. (1999). *Handbook for the Adult and Adolescent Parenting*

Inventory. Eau Claire, WI: Family Development Resources.

Bavolek, S. J. (1984). *Handbook for the adult-teen parenting inventory*. Schaumburg, IL: Family Development Associates.

Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Manual for the Beck depression inventory-II. *San Antonio, TX: Psychological Corporation*, 1–82. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Manual+for+the+Beck+depression+inventory-II#0>

Beck, A. T., Steer, R. A., & Carbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8(1), 77–100. doi:10.1016/0272-7358(88)90050-5

Bernstein, D. P., Fink, L., Handelsman, L., Foote, J., Lovejoy, M., Wenzel, K., ... Ruggiero, J. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *The American journal of psychiatry*, 151, 1132–1136.

Bernstein, D. P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report*. San Antonio, TX: The Psychological Corporation. Retrieved from: http://scholar.google.ca/scholar?hl=en&as_sdt=0,5&q=childhood+trauma+questionnaire,+1998#0 on 20/03/14

Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., et al. (2003). Development and validation of a brief screening version of the

- Childhood Trauma Questionnaire. *Child Abuse & Neglect*, 27(2), 169–190.
doi:10.1016/S0145-2134(02)00541-0
- Bert, S. C., Guner, B. M., & Lanzi, R. G. (2009). The Influence of Maternal History of Abuse on Parenting Knowledge and Behavior. *Family relations*, 58(2), 176–187. doi:10.1111/j.1741-3729.2008.00545.x
- Binggeli, N. J., Hart, S. N., & Brassard, M. R. (2001). *Psychological maltreatment of children*. Thousand Oaks, CA: Sage Publications.
- Bowlby, J. (1979). *The breaking and making of affectional bonds*. London: Tavistock.
- Bowlby, J. (1969). *Attachment and loss*, Vol. 1: Attachment. New York: Basic Books.
- Brassard, M. R., & Donovan, K. M. (2006). Defining psychological maltreatment. In M. Feerick, J. F. Knutson, Trickett, P. K., & Flanzer, S. (Eds.), *Child Abuse and Neglect*. Baltimore, MD: Brookes Publishing.
- Brassard, M. R., Germaine, R., & Hart, S. N. (Eds.). (1987). *Psychological maltreatment of children and youth*. New York: Pergamon
- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 102–127). New York: Guilford Press.
- Brewin, C.R., Andrews, B., & Gotlib, I.H. (1993). Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*, 113, 82-98.
- Briere, J. & Runtz, M. (1988). Multivariate correlates of childhood psychological and physical maltreatment among university women. *Child Abuse & Neglect*,

12(3), 331–341.

Briere, J. & Runtz, M. (1990). Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse & Neglect*, 14, 357–364.

Bugental, D. B. (2011). Parent Attribution Test: Manual Revised 10/1/2011. Accessed from: <https://labs.psych.ucsb.edu/bugental/daphne/PARENT%20ATTRIBUTION%20TEST.manual.2011.pdf>, 24th March 2014.

Bugental, D. B., Blue, J., Cruzcosa, M., Laboratories, B. T., & Hill, M. (1989). Perceived Control over Caregiving Outcomes : Implications for Child Abuse. *Developmental Psychology*, 25(4), 532–539.

Bugental, D. B., & Happaney, K. (2004). Predicting infant maltreatment in low-income families: the interactive effects of maternal attributions and child status at birth. *Developmental Psychology*, 40(2), 34–243. doi:10.1037/0012-1649.40.2.234

Bugental, D. B., Johnston, C., New, M., & Silvester, J. (1998). Measuring parental attributions: Conceptual and methodological issues. *Journal of Family Psychology*, 12(4), 459–480. doi:10.1037//0893-3200.12.4.459

Bugental, D. B., & Shennum, W. A. (1984). “Difficult” children as elicitors and targets of adult communication patterns: an attributional-behavioral transactional analysis. *Monographs of the Society for Research in Child Development*, 49, 1–79.

Bugental, D. B., & Shennum, W. (2002). Gender, power, and violence in the family. *Child Maltreatment*, 7, 56–64. doi:10.1177/1077559502007001005

- Caldwell, B., & Bradley, R. (1984). *Home Observation for Measurement of the Environment (HOME) – Revised Edition*. University of Arkansas: Little Rock
- Caldwell, B. & Bradley, R. (1984). *Home Observation for Measurement of the Environment (HOME) - Revised Edition*. University of Arkansas, Little Rock
- Caldwell, J. G., Shaver, P. R., Li, C.-S., & Minzenberg, M. J. (2011). Childhood Maltreatment, Adult Attachment, and Depression as Predictors of Parental Self-Efficacy in At-Risk Mothers. *Journal of Aggression, Maltreatment & Trauma*, 20(6), 595-616. doi:10.1080/10926771.2011.595763
- Carr, S. N., & Francis, A. J. P. (2009). Do Early Maladaptive Schemas Mediate the Relationship Between Childhood Experiences and Avoidant Personality Disorder Features? A Preliminary Investigation in a Non-Clinical Sample. *Cognitive Therapy and Research*, 34(4), 343–358. doi:10.1007/s10608-009-9250-1
- Chung, E. K., Mathew, L., Rothkopf, A. C., Elo, I. T., Coyne, J. C., & Culhane, J. F. (2009). Parenting attitudes and infant spanking: the influence of childhood experiences. *Pediatrics*, 124, 278–286. doi:10.1542/peds.2008-3247
- Cicchetti, D., & Toth, S. L. (2005). Child maltreatment. *Annual review of clinical psychology*, 1, 409–38. doi:10.1146/annurev.clinpsy.1.102803.144029
- Claussen, A. H., & Crittenden, P. M. (1991). Physical and psychological maltreatment: relations among types of maltreatment. *Child abuse & neglect*, 15, 5–18. doi:10.1016/0145-2134(91)90085-R
- Cohen, J. (1960). A coefficient of agreement of nominal scales. *Educational and Psychological Measurement*, 20, 37–46. doi:10.1177/001316446002000104

- Cole, P. M., & Putnam, F. W. (1992). Effect of incest on self and social functioning: a developmental psychopathology perspective. *Journal of consulting and clinical psychology*, 60, 174–184. doi:10.1037/0022-006X.60.2.174
- Cole, P. M., Woolger, C., Power, T. G., & Smith, K. D. (1992). Parenting difficulties among adult survivors of father-daughter incest. *Child abuse & neglect*, 16, 239–249. doi:10.1016/0145-2134(92)90031-L
- De Paúl, J., & Domenech, L. (2000). Childhood history of abuse and child abuse potential in adolescent mothers: a longitudinal study. *Child abuse & neglect*, 24(5), 701–13. doi:10.1016/S0145-2134(00)00124-1
- Dozier, M., & Bick, J. (2007). Changing caregivers: Coping with early adversity. *Psychiatric Annals*, 37, 411–445.
- Egeland, B. (1993). A history of abuse is a major risk factor for abusing in the next generation. In R. Gelles & D.R. Loseke (Eds.), *Current controversies on family violence*, (pp.197-208). Newbury Park, CA: Sage Publications.
- Elliott, G. C., Cunningham, S. M., Linder, M., Colangelo, M., & Gross, M. (2005). Child physical abuse and self-perceived social isolation among adolescents. *Journal of interpersonal violence*, 20(12), 1663–84. doi:10.1177/0886260505281439
- Ertem, I.O., Leventhal, J.M. & Dobbs, S. (2000). Intergenerational continuity of child physical abuse: How good is the evidence? *Lancet*, 356(9232), 814–819.
- Fritz, M. S., & Mackinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science : a journal of the American Psychological Society / APS*, 18, 233–239. doi:10.1111/j.1467-9280.2007.01882.x

- Fujiwara, T., Okuyama, M., & Izumi, M. (2012). The impact of childhood abuse history, domestic violence and mental health symptoms on parenting behaviour among mothers in Japan. *Child: care, health and development*, 38, 530–7. doi:10.1111/j.1365-2214.2011.01272.x
- Gibb, B. E. (2002). Childhood maltreatment and negative cognitive styles: A quantitative and qualitative review. *Clinical Psychology Review*. doi:10.1016/S0272-7358(01)00088-5
- Glaser, B. A., Campbell, L. F., Calhoun, G. B., Bates, J. M., & Petrocelli, J. V. (2002). The early maladaptive schema questionnaire-short form: A construct validity study. *Measurement and Evaluation in Counseling and Development*, 35, 2–13.
- Glaser, D. (2002). Emotional abuse and neglect (psychological maltreatment): A conceptual framework. *Child Abuse and Neglect*. 26, 697-714. doi:10.1016/S0145-2134(02)00342-3
- Glaser, D. (2011). How to deal with emotional abuse and neglect: further development of a conceptual framework (FRAMEA). *Child abuse & neglect*, 35, 866–75. doi:10.1016/j.chiabu.2011.08.002
- Green, S. B. (1991). How Many Subjects Does It Take To Do A Regression Analysis. *Multivariate Behavioral Research*. doi:10.1207/s15327906mbr2603_7
- Haapasalo, J., & Aaltonen, T. (1999). Mothers' Abusive Childhood Predicts Child Abuse. *Child Abuse Review*, 8, 231–250.

- Hart, S. N., & Glaser, D. (2011). Psychological maltreatment - Maltreatment of the mind: A catalyst for advancing child protection toward proactive primary prevention and promotion of personal well-being. *Child Abuse and Neglect*, 35, 758–766. doi:10.1016/j.chiabu.2011.06.002
- Hawke, L. D., & Provencher, M. D. (2012). The Canadian French Young Schema Questionnaire: Confirmatory factor analysis and validation in clinical and nonclinical samples. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 44(1), 40–49. doi:10.1037/a0026197
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical Mediation Analysis in the New Millennium. *Communication Monographs*, 76, 408-420
doi:10.1080/03637750903310360
- Hughes, D. A. (2006). *Building the bonds of attachment: Awakening love in deeply troubled children* (2nd Ed). Oxford: Rowman and Littlefield publishers.
- Kaplan, S. J., Pelcovitz, D., & Labruna, V. (1999). Child and adolescent abuse and neglect research: a review of the past 10 years. Part I: Physical and emotional abuse and neglect. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38, 1214–1222. doi:10.1097/00004583-199910000-00009
- Lang, A. J., Gartstein, M. A., Rodgers, C. S., & Lebeck, M. M. (2010). The impact of maternal childhood abuse on parenting and infant temperament. *Journal of child and adolescent psychiatric nursing : official publication of the Association of Child and Adolescent Psychiatric Nurses, Inc*, 23, 100–110. doi:10.1111/j.1744-6171.2010.00229.x

- Little, R. J. A., & Rubin, D. B. (1987). *Statistical analysis with missing data*. New York: Wiley.
- Main, M., & Cassidy, J. (1988). Categories of response to reunion with the parent at age 6: Predictable from infant attachment classifications and stable over a 1-month period. *Developmental Psychology*. doi:10.1037/0012-1649.24.3.415
- Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In *Attachment during the preschool years: Theory, research and intervention* (pp. 161–182). London: University of Chicago Press
- Malone, J. C., Levendosky, A. A., Dayton, C. J., & Bogat, G. A. (2010). Understanding the “Ghosts in the Nursery” of pregnant women experiencing domestic violence: Prenatal maternal representations and histories of childhood maltreatment. *Infant Mental Health Journal*, 31, 432–454. doi:10.1002/imhj.20264
- McMillan, A. S., Barlow, J., Stewart-Brown, S. L., Carter, Y., Sidebotham, P., & Paul, M. (2008). Systematic review of interventions for the secondary prevention and treatment of emotional abuse of children by primary carers. Accessed from: <http://wrap.warwick.ac.uk/2906/>, on 22/03/14
- Messman-Moore, T. L., & Coates, A. A. (2007). The Impact of Childhood Psychological Abuse on Adult Interpersonal Conflict. *Journal of Emotional Abuse*, 7(2), 75-92. doi:10.1300/J135v07n02_05

- Miller-Perrin, C. L., & Perrin, R. D. (1999). *Child maltreatment: an introduction*. Newbury Park, CA: Sage Publications.
- Milner, J. S. (1986). *The Child Abuse Potential Inventory: Manual*. (2nd ed.). Webster, NC: Psytec
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., Altman, D., Antes, G, ... Tugwell, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*. doi:10.1371/journal.pmed.1000097
- Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1996). The long-term impact of the physical, emotional, and sexual abuse of children: a community study. *Child abuse & neglect*, 20, 7–21.
doi:[http://dx.doi.org/10.1016/0145-2134\(95\)00112-3](http://dx.doi.org/10.1016/0145-2134(95)00112-3)
- Naughton, A. M., Maguire, S. A., Mann, M. K., Lumb, R. C., Tempest, V., Gracias, S., ...Kepm, A. M. (2013). Emotional, Behavioral, and Developmental Features Indicative of Neglect or Emotional Abuse in Preschool Children: A Systematic Review. *JAMA Pediatrics*, 16(8), 769-75, doi:10.101/jamapediatrics.2013.192
- Newcomb, M. D., & Locke, T. F. (2001). Intergenerational cycle of maltreatment: A popular concept obscured by methodological limitations. *Child Abuse and Neglect*, 25, 1219–1240. doi:10.1016/S0145-2134(01)00267-8
- Office for National Statistics (2005). *Harmonised Concept and Questions for Social Data Sources: Primary Standards*. Office for National Statistics, 3rd edition.
Accessed from: file:///C:/Users/Mary/Downloads/p1_tcm77-290136%20(1).pdf,
on 02/04/14

- Okado, Y., & Azar, S. T. (2011). The Impact of Extreme Emotional Distance in the Mother-Child Relationship on the Offspring's Future Risk of Maltreatment Perpetration. *Journal of Family Violence*, 26(6), 439-452. doi:10.1007/s10896-011-9378-0
- Olds, D. L., & Kitzman, H. (1993). Review of Research on Home Visiting for Pregnant Women and Parents of Young Children. *The Future of Children*, 3, 53–92. doi:10.2307/1602543
- Oliver, J. E. (1993). Intergenerational transmission of child abuse: rates, research, and clinical implications. *The American journal of psychiatry*, 150, 1315–1324.
- Pereira, J., Vickers, K., Atkinson, L., Gonzalez, A., Wekerle, C., & Levitan, R. (2012). Parenting stress mediates between maternal maltreatment history and maternal sensitivity in a community sample. *Child Abuse and Neglect*, 36, 433–437. doi:10.1016/j.chiabu.2012.01.006
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40, 879–891. doi:10.3758/BRM.40.3.879
- Rich, D. J., Gingerich, K. J., & Rosen, L. A. (1997). Childhood Emotional Abuse and Associated Psychopathology in College Students. *Journal of College Student Psychotherapy*, 11(3), 13-28. doi:10.1300/J035v11n03_04

- Riggs, S. A. (2010). Childhood Emotional Abuse and the Attachment System Across the Life Cycle: What Theory and Research Tell Us. *Journal of Aggression, Maltreatment & Trauma, 19*, 5-51. doi:10.1080/10926770903475968
- Rucker, D. D., Preacher, K. J., Tormala, Z. L., & Petty, R. E. (2011). Mediation Analysis in Social Psychology: Current Practices and New Recommendations. *Social and Personality Psychology Compass, 5*, 359–371. doi:10.1111/j.1751-9004.2011.00355.x
- Sackett, L. A., & Saunders, D. G. (1999). The impact of different forms of psychological abuse on battered women. *Violence and victims, 14*, 105–117.
- Sanders, M. R., Pidgeon, A. M., Gravestock, F., Connors, M. D., Brown, S., & Young, R. W. (2004). Does parental attributional retraining and anger management enhance the effects of the Triple P-Positive Parenting Program with parents at risk of child maltreatment? *Behavior Therapy, 35*, 513–535. doi:10.1016/S0005-7894(04)80030-3
- Scottish Intercollegiate Guidelines Network, 2011. *SIGN 50: A guideline developer's handbook*. Retrieved 15th January 2013 from <http://www.sign.ac.uk/pdf/sign50.pdf>
- Siddiqui, A., Haglöf, B. & Eisemann. (2010). Own memories of upbringing as a determinant of prenatal attachment in expectant women. *Journal of Reproductive and Infant Psychology, 18(1)*, 67–74.
- Simard, V., Moss, E., & Pascuzzo, K. (2011). Early maladaptive schemas and child and adult attachment: a 15-year longitudinal study. *Psychology and psychotherapy, 84*, 349–66. doi:10.1111/j.2044-8341.2010.02009.x

- Slep, A. M. S., & O’Leary, S. G. (1998). The effects of maternal attributions on parenting: An experimental analysis. *Journal of Family Psychology*, 12(12), 234-243. doi:10.1037/0893-3200.12.2.234
- Spertus, I. L., Yehuda, R., Wong, C. M., Halligan, S., & Seremetis, S. V. (2003). Childhood emotional abuse and neglect as predictors of psychological and physical symptoms in women presenting to a primary care practice. *Child Abuse and Neglect*, 27, 1247–1258. doi:10.1016/j.chiabu.2003.05.001
- Straus, M. A., & Field, C. J. (2003). Psychological aggression by American parents: National data on prevalence, chronicity, and severity. *Journal of Marriage and Family*, 65, 795–808. doi:10.1111/j.1741-3737.2003.00795.x
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using Multivariate Statistics*. Pearson Education Ltd: Essex.
- Thornberry, T. P., Knight, K. E., & Lovegrove, P. J. (2012). Does Maltreatment Beget Maltreatment? A Systematic Review of the Intergenerational Literature. *Trauma, Violence, & Abuse*, 13, 135-152. doi:10.1177/1524838012447697
- Vissing, Y. M., Straus, M. A., Gelles, R. J., & Harrop, J. W. (1991). Verbal aggression by parents and psychosocial problems of children. *Child abuse & neglect*, 15, 223–238. doi:10.1016/0145-2134(91)90067-N
- Wright, M. O. (2007). The Long-Term Impact of Emotional Abuse in Childhood: Identifying mediating and moderating processes. *Journal of Emotional Abuse*, 7, 1-8. doi:10.1300/J135v07n02_01

Young, J. E. (2005). *Young Schema Questionnaire-Short Form 3 (YSQ-S3)*. New York: Schema Therapy Institute

Young, J.E., Klosko, J. S., & Weishaar, M. E. (2003). *Schema therapy: A practitioner's guide*. New York: Guilford.

Zalewski, M., Cyranowski, J. M., Cheng, Y., & Swartz, H. A. (2013). Role of maternal childhood trauma on parenting among depressed mothers of psychiatrically ill children. *Depression and anxiety*, 30, 792–799.
doi:10.1002/da.22116

Zuravin, S. J., & Fontanella, C. (1999). Parenting behaviors and perceived parenting competence of child sexual abuse survivors. *Child Abuse and Neglect*, 23, 623–632. doi:10.1016/S0145-2134(99)00045-9

Appendix 1: Quality Criteria

Internal Validity		
<i>A well conducted study will ensure that:</i>	<i>In this study the criterion is:</i>	
The study addresses an appropriate and clearly focussed question	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
Selection of subjects		
There is a satisfactory participation rate	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
There are low levels of attrition	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
Baseline demographic characteristics of the participants are presented.	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The focal generation includes both mothers who experienced childhood emotional abusive/neglectful behaviours and those who did not	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The maltreatment status of the comparison group (where this is present) is assessed	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
Assessment		
A clear definition of emotional abusive or emotional neglectful behaviours is evident (i.e. type of maltreatment measured and whether it is measured as prevalence, severity, number of occurrences, etc).	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The measure of assessment of exposure (to emotionally abusive/neglectful behaviours) is valid and reliable	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The measure of assessment of outcome is valid and reliable	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The study uses prospective data (i.e. follows mothers who report emotionally abusive/neglectful childhood experiences over a period of time to assess outcomes).	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
The study uses an independent rating of maternal outcome characteristics (i.e. maternal behaviours are measured by an independent observer rather than self-report).	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
Confounding factors		
The main potential confounders are identified and taken into	Well covered	Adequately addressed

account in the design and analysis.	Poorly addressed Not reported	Not addressed Not applicable
Statistical Analyses		
The statistical analysis used is appropriate	Well covered Poorly addressed Not reported	Adequately addressed Not addressed Not applicable
Overall assessment of the study		
How well has the study done to minimise the risk of bias or confounding and to establish a relationship between exposure and effect?	High quality (++) <input type="checkbox"/> Acceptable (+) <input type="checkbox"/> Unacceptable – reject <input type="checkbox"/>	
Taking into account clinical considerations, your evaluation of the methodology used, and the statistical power of the study, do you think there is clear evidence of an association between exposure and outcome?	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Notes. Summarise the authors conclusions. Add any comments on your own assessment of the study, and the extent to which it answers your question and mention any areas of uncertainty raised above:		

Appendix 2: Table with overview of full-text articles reviewed but not retained for review

Author(s)	Title	Reason for exclusion
Bailey, DeOlivera, Wolfe et al., (2012).	The impact of childhood maltreatment history on parenting: A comparison of maltreatment types and assessment methods.	Investigates a composite-abuse factor comprising physical abuse, neglect and emotional maltreatment. Does not explore emotionally abusive or neglectful childhood experiences alone.
Berlin, Appleyard & Dodge (2011).	Intergenerational continuity in child maltreatment: Mediating mechanisms and implications for prevention.	Does not include a focus on emotionally abusive/neglectful childhood experiences.
Sandberg, Feldhousen & Busby (2011).	The impact of childhood abuse on women's and men's perceived parenting: Implications for practitioners.	Does not include a focus on emotionally abusive/neglectful childhood experiences.
Barrett (2009).	The impact of childhood sexual abuse and other forms of childhood adversity on adulthood parenting.	Does not include a focus on emotionally abusive/neglectful childhood experiences.
Dixon, Browne & Hamilton-Giachritsis (2009).	Patterns of risk and protective factors in the intergenerational cycle of maltreatment.	Does not include a focus on emotionally abusive/neglectful childhood experiences.
Moehler, Biringen & Poustka (2007).	Emotional availability in a sample of mothers with a history of abuse.	Does not include a focus on emotionally abusive/neglectful childhood experiences.
Renner & Slack (2006).	Intimate partner violence and child maltreatment: Understanding intra – and intergenerational connections.	Does not include a focus on emotionally abusive/neglectful behaviours.
Lang, Rodgers & Lebeck (2006).	Associations between maternal childhood maltreatment and psychopathology and aggression during pregnancy and postpartum.	No focus on intergenerational parenting behaviours.
Okado & Azar	The impact of extreme emotional distance in the mother-child relationship on the offspring's future risk of maltreatment perpetration	Participants are both male and female non-parent undergraduates.
Wilkes (2002).	Abuse child to nonabusive parent: Resilience and conceptual change.	Does not include a focus on emotionally abusive/neglectful behaviours.
Newcombe & Locke (2001).	Intergenerational cycle of maltreatment: A popular concept obscured by methodological limitations.	Does not include a focus on emotionally abusive/neglectful behaviours independently of multi-type maltreatment experiences.
Marcenko, Kemp & Larson (2000).	Intergenerational cycle of maltreatment: A popular concept obscured by methodological limitations.	Does not include a focus on emotionally abusive/neglectful behaviours independently of multi-type maltreatment experiences.

Author(s)	Title	Reason for exclusion
Marcenko, Kemp & Larson (2000).	Childhood experiences of abuse, later substance use, and parenting outcomes among low-income mothers.	Does not include a focus on emotionally abusive/neglectful behaviours.
Walker (1999).	The inter-generational transmission of trauma: The effects of abuse on the survivors relationship with their children and on the children themselves.	Qualitative methodology.
Buist (1998)	Childhood abuse, postpartum depression and parenting difficulties: A literature review.	Does not explore emotionally abusive or neglectful childhood experiences alone.
Wiehe (1992).	Abusive and non-abusive parents: How they were parented.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Muzik, Bocknek, Broderick et al., (2013).	Mother-infant bonding impairment across the first 6 months postpartum: the primacy of psychopathology in women with childhood abuse and neglect histories.	Does not explore emotionally abusive or neglectful childhood experiences alone.
Valentino, Nuttall, Comas et al (2012).	Intergenerational continuity of child abuse among adolescent mothers: authoritarian parenting, community violence, and race.	Does not explore emotionally abusive or neglectful childhood experiences alone.
Marysko, Rett, Mattheis et al., (2010).	History of childhood abuse is accompanied by increased dissociation in young mothers give months postnatally.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Libby, Orton, Beals, et al., (2008).	Childhood abuse and later parenting outcomes in two American Indian tribes.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Newcombe & Locke (2005).	Childhood adversity and poor mothering: consequences of polydrug abuse as a moderator.	Does not explore emotionally abusive or neglectful childhood experiences alone.
Dixon, Hamilton-Giachritsis & Browne (2005).	Attributions and behaviours of parents abused as children: a mediational analysis of the intergenerational continuity of child maltreatment (Part II).	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Banyard, Williams & Siegel (2003).	The impact of complex trauma and depression on parenting: an exploration of mediating risk and protective factors.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Plant, Bakers, Waters, et al., (2013).	Intergenerational transmission of maltreatment and psychopathology: the role of antenatal depression.	Does not explore emotionally abusive or neglectful childhood experiences alone.
Kress, Cierpka, Moehler et al., (2012).	Maternal affect regulation of mothers with a history of abuse in mother-infant interaction.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Cort, Toth, Cerulli et al (2011).	Maternal intergenerational transmission of childhood multitype maltreatment.	Does not explore emotionally abusive or neglectful childhood experiences alone.

Author(s)	Title	Reason for exclusion
Schwerdtfeger & Nelson Goff (2007).	Intergenerational transmission of trauma: Exploring mother-infant prenatal attachment.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Bennett, Sullivan & Lewis (2006).	Relations of parental report and observation of parenting to maltreatment history.	Does not include a focus on emotionally abusive or neglectful childhood experiences.
Kim & Cicchetti (2004)	A longitudinal study of child maltreatment, mother-child relationship quality and maladjustment: The role of self-esteem and social competence.	No focus on intergenerational parenting.
Pears & Capaldi (2001)	Intergenerational transmission of abuse: A two-generational prospective study of an at-risk sample.	Does not include a focus on emotionally abusive or neglectful childhood experiences.

Appendix 3: Author guidelines, Child Abuse Review.

1. Initial Manuscript Submission

Submitted manuscripts should not have been previously published and should not be submitted for publication elsewhere while they are under consideration by Wiley. Submitted material will not be returned to the author unless specifically requested.

Child Abuse Review has now adopted **ScholarOne Manuscripts**, for online manuscript submission and peer review. The new system brings with it a whole host of benefits including:

- *Quick and easy submission*
- *Administration centralised and reduced*
- *Significant decrease in peer review times*

From now on **all** submissions to the journal must be submitted online at <http://mc.manuscriptcentral.com/car>. Full instructions and support are available on the site and a user ID and password can be obtained on the first visit. If you require assistance then click the **Get Help Now** link which appears at the top right of every ScholarOne Manuscripts page. If you cannot submit online, please contact Julia Walsh in the Editorial Office(Child.Abuse.Review@nhs.net).

2. Manuscript style

The language of the journal is English. All submissions must have a title, be double-line spaced and have a margin of 3cm all round. Illustrations and tables must be supplied separately, and not be incorporated into the text. Their proposed location should be indicated in the text.

The paper must include:

- A **title page** with the full title, the names and affiliations of all authors and a running headline. Give the full address, including email, telephone and fax, of the author who is to check the proofs.
- The **name(s)** of any **sponsor(s)** or **research funder(s)**, along with **grant number(s)**.
- An unstructured **abstract** of up to 200 words for all Papers. An abstract is a concise summary of the whole Paper, not just the conclusions, and is understandable without reference to the rest of the Paper. It should contain no citation to other published work.
- Up to 75 words as bullet points outlining the Key Practitioner Messages contained in the paper.
- Up to four **keywords** that describe your Paper, for indexing purposes.
- The word-length of the manuscript at the end.

Papers (excluding tables and references) should be between 3,000 and 5,000 words,

Short Reports and Case Studies should be between 1,000 and 2,500 and do not require an abstract.

3. Ethical Guidelines

Child Abuse Review adheres to the ethical guidelines for publication and research summarised below.

3.1. Authorship and Acknowledgements

Authorship: Authors submitting a paper do so on the understanding that the manuscript has been read and approved by all authors and that all authors agree to the submission of the manuscript to the Journal. ALL named authors must have made an active contribution to the conception and design and/or analysis and interpretation of the data and/or the drafting of the paper and ALL must have critically reviewed its content and have approved the final version submitted for publication. Participation solely in the acquisition of funding or the collection of data does not justify authorship and, except in the case of complex large-scale or multi-centre research, the number of authors should not exceed six.

Child Abuse Review adheres to the definition of authorship set up by The International Committee of Medical Journal Editors (ICMJE). According to the ICMJE authorship criteria should be based on 1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, 2) drafting the article or revising it critically for important intellectual content and 3) final approval of the version to be published. Authors should meet conditions 1, 2 and 3.

It is a requirement that all authors have been accredited as appropriate upon submission of the manuscript. Contributors who do not qualify as authors should be mentioned under Acknowledgements.

Acknowledgements: Under Acknowledgements please specify contributors to the article other than the authors accredited. Please also include specifications of the source of funding for the study and any potential conflict of interests if appropriate. Suppliers of materials should be named and their location (town, state/county, country) included.

3.2. Ethical Approvals

Research involving human participants will only be published if such research has been conducted in full accordance with ethical principles, including the World Medical Association Declaration of Helsinki (version, 2002<http://www.wma.net/en/30publications/10policies/b3/index.html>) and the additional requirements, if any, of the country where the research has been carried out. Manuscripts must be accompanied by a statement that the research was undertaken with the understanding and written consent of each participant (or the participant's representative, if they lack capacity), and according to the above mentioned principles. A statement regarding the fact that the study has been independently reviewed and approved by an ethical board should also be included.

All studies using human participants should include an explicit statement in the Material and Methods section identifying the review and ethics committee approval for each study, if applicable. Editors reserve the right to reject papers if there is doubt as to whether appropriate procedures have been used.

Ethics of investigation: Papers not in agreement with the guidelines of the Helsinki Declaration as revised in 1975 will not be accepted for publication.

3.3 Clinical Trials

Clinical trials should be reported using the CONSORT guidelines available at www.consort-statement.org. A CONSORT checklist should also be included in the submission material ([http://www.consort-statement.org/mod_product/uploads/CONSORT 2001 checklist.doc](http://www.consort-statement.org/mod_product/uploads/CONSORT_2001_checklist.doc)).

Child Abuse Review encourages authors submitting manuscripts reporting from a clinical trial to register the trials in any of the following free, public clinical trials registries: www.clinicaltrials.gov, www.isrctn.org. The clinical trial registration number and name of the trial register will then be published with the paper.

3.4 Conflict of Interest and Source of Funding

Conflict of Interest: Authors are required to disclose any possible conflict of interest. These include financial (for example patent, ownership, stock ownership, consultancies, speaker's fee). Author's conflict of interest (or information specifying the absence of conflicts of interest) will be published under a separate heading entitled 'Conflict of Interests'.

Child Abuse Review requires that sources of institutional, private and corporate financial support for the work within the manuscript must be fully acknowledged, and any potential conflicts of interest noted. Please include this information under the separate headings of 'Source of Funding' and 'Conflict of Interest' at the end of your manuscript.

If the author does not include a conflict of interest statement in the manuscript then the following statement will be included by default: "No conflicts of interest have been declared".

Source of Funding: Authors are required to specify the source of funding for their research when submitting a paper. Suppliers of materials should be named and their location (town, state/county, country) included. The information will be disclosed in the published article.

4. Reference style

Harvard style must be used. In the text the names of authors should be cited followed by the date of publication, e.g. Adams & Boston (1993). Where there are three or more authors, the first author's name followed by *et al.* should be used in the text, e.g. Goldberg *et al.* (1994). The reference list should be prepared on a separate sheet with names listed in alphabetical order. The references should list authors' surnames and initials, date of publication, title of article, name of book or journal, volume

number or edition, editors, publisher and place of publication. In the case of an article or book chapter, page numbers should be included routinely.

All references must be complete and accurate. Where possible the [DOI](#)* for the reference should be included at the end of the reference. Online citations should include date of access. If necessary, cite unpublished or personal work in the text but do not include it in the reference list.

References should be listed in the following style:

Munro E. 2008. *Effective Child Protection*. Sage Publications: Los Angeles, USA.

Parton N. 2007. Safeguarding children: a socio-historical analysis. In: *The child protection handbook* (3rd ed.), Wilson K & James A (eds). Bailliere Tindall: Edinburgh; pp. 9-30.

St James-Roberts I. 2007. Helping parents to manage infant crying and sleeping: A review of the evidence and its implications for services. *Child Abuse Review* **16**: 47-69. DOI: 10.1002/car.968

**The Digital Object Identifier (DOI) is an identification system for intellectual property in the digital environment. Developed by the International DOI Foundation on behalf of the publishing industry, its goals are to provide a framework for managing intellectual content, link customers with publishers, facilitate electronic commerce, and enable automated copyright management.*

5. Illustrations

All figures and artwork must be provided in electronic format. Please save vector graphics (e.g. line artwork) in Encapsulated Postscript Format (EPS) and bitmap files (e.g. halftones) or clinical or in vitro pictures in Tagged Image Format (TIFF).

Further information can be obtained at Wiley-Blackwell's guidelines for illustrations: <http://authorservices.wiley.com/bauthor/illustration.asp>

6. Copyright and Permissions

• Copyright Transfer Agreement

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to login into Author Services; where via the Wiley Author Licensing Service (WALS) they will be able to complete the license agreement on behalf of all authors on the paper.

For authors signing the copyright transfer agreement

If the OnlineOpen option is not selected the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the Copyright FAQs below:

[CTA Terms and Conditions](#)

For authors choosing OnlineOpen

If the OnlineOpen option is selected the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

Creative Commons Attribution License OAA

Creative Commons Attribution Non-Commercial License OAA

Creative Commons Attribution Non-Commercial -NoDerivs License OAA

To preview the terms and conditions of these open access agreements please visit the Copyright FAQs hosted on [Wiley Author Services](#) and

visit <http://www.wileyopenaccess.com/details/content/12f25db4c87/Copyright--License.html>.

If you select the OnlineOpen option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) you will be given the opportunity to publish your article under a CC-BY license supporting you in complying with Wellcome Trust and Research Councils UK requirements. For more information on this policy and the Journal's compliant self-archiving policy please visit: <http://www.wiley.com/go/funderstatement>.

- **Permission grants** - if the manuscript contains extracts, including illustrations, from other copyright works (including material from on-line or intranet sources) it is the author's responsibility to obtain written permission from the owners of the publishing rights to reproduce such extracts using the Wiley [Permission Request Form](#).

Submission of a manuscript will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere at the same time. Submitted material will not be returned to the author, unless specifically requested.

7. Reporting and interpretation of Statistical Results

When reporting and interpreting the findings of a statistical analysis the authors should focus on the clinical importance of the results rather than simply the statistical evidence. In order to do this, the confidence interval for any parameter estimate is crucial, although the standard error would also be acceptable. Do the implications of these results differ depending on where in the confidence interval the true value may lie?

The p-value indicates the statistical evidence (against the null hypothesis). Authors should refrain from the use of the word significant to describe results for which a p-value is less than 0.05, instead considering the level of evidence against the null hypothesis in combination with the clinical importance as described above.

For further reading, see

Sterne JA, Davey Smith G.

Sifting the evidence - what's wrong with significance tests?

BMJ. 2001 Jan 27;322(7280):226-31.

<<http://www.bmj.com/content/322/7280/226.1.full.pdf>>



Appendix 4: Participant Information Sheet

You are being invited to take part in a study that is being carried out by NHS Dumfries and Galloway and the University of Edinburgh.

Before you decide whether or not you would like to take part, please read the information below carefully as it tells you about the purpose of the study and our responsibility to keep any information you provide confidential.

Ethical approval for the study has been granted following review by members of the Clinical Psychology ethics committee at the University of Edinburgh.

What is the purpose of the study?

The study aims to investigate how experiences in a mother's childhood may impact on how she thinks about herself and her relationship with her own child(ren). It is hoped that this information will help us to better support mothers who have had difficult childhood experiences. The study is being carried out in partial fulfilment of a Doctorate in Clinical Psychology degree at the University of Edinburgh and is being supervised by members of the Clinical and Academic team from within NHS Dumfries and Galloway and the University of Edinburgh.

Why have I been chosen?

You have been invited to take part because you are a mother who has at least one child who is aged between four and twelve years old. All mother's who have children attending participating schools in your local authority area have been invited to take part.

What is involved?

If you choose to take part in this study you will be invited to complete a pack of five questionnaires which will ask you a variety of questions about your early life experiences and your current thoughts in relation to yourself and your relationship with your own child(ren).

It should take between 30-40mins to complete all of the questionnaires. We will provide an envelope for you to return the questionnaires and consent form in.

Do I have to take part?

No. Your participation in this study is voluntary. If you do decide to take part the information you supply will be anonymous. You can also choose to withdraw from the study without having to give a reason. The data you supply will be compiled together with that of other participants and research outcomes will be examined based on this large body of responses. Your responses will not be linked to your personal information. The results will be written up as part of a thesis project and we will also seek to submit the data as part of an article to a peer-reviewed journal for publication.

How do I take part in the study?

If you would like to take part in this study please complete the 'Consent Form' which is attached and return it to your child's school office in the envelope provided. You will then be sent a Study Pack via a further Bag-drop. The Study Pack will contain five questionnaires together with a sealable envelope. You should then complete and return the questionnaires to your child's school office in the sealable envelope provided.

What are the possible disadvantages, risks or benefits of taking part?

We understand that it can sometimes be upsetting for people to think about difficult childhood experiences they may have had. If you would like to talk to anyone about any issues that are raised by taking part in the study then you may wish to make contact with one of the agencies listed below. Alternatively, you could speak to your GP.

Breathing Space	0800 83 85 87
ChildLine	0800 11 11

Further information

If you would like further information on this study, its purpose or aims then please contact the researcher by email (maryhughes2@nhs.net).

If you would like to be kept informed about the results of the research then please make a request to maryhughes2@nhs.net. Final results are not likely to be available until May 2014.



Appendix 5: Consent Form

The purpose of this study is to investigate how mothers' experience of being parented may impact on how they think about themselves and their relationship with their own child(ren). It is hoped that this information will help us to better support mothers who have had difficult childhood experiences.

Please read the information below and tick each box to confirm that you have read and understood each of the statements.

- √
- I have read and understood the Participant Information Sheet. ☐
- Any questions which I have had about my participation in this study have been answered satisfactorily. ☐
- I am aware of the potential risks involved in taking part in this study ☐
- I understand that my participation in this study is voluntary and that I have the right to choose not to take part or to withdraw from the study. ☐

*Please indicate tick the box below to indicate your consent to take part in this study.
Thank you for your time.*

- I would like to take part in this study ☐



Appendix 6: Guide to taking part

Thank you for taking part in this study.

Please complete the enclosed Consent Form and 5 Questionnaires. Completion should take 30-40 minutes.

Following completion of the questionnaires please return them to your child's School Office in the enclosed sealable envelope. A box will be placed beside your Child's School Office for return of questionnaires.

The questionnaires will then be collected by the researcher.

We understand that it can sometimes be upsetting for people to think about difficult childhood experiences they may have had. If you would like to talk to anyone about any issues that are raised by taking part in the study then you may wish to make contact with one of the agencies listed below. Alternatively, you could speak to your GP.

Breathing Space ***0800 83 85 87***
ChildLine ***0800 11 11***

Your participation is much appreciated!

Appendix 7: Demographic Information Questionnaire

Thank you for taking part in this study. Please complete the information below.

What is your current age? _____

What is the age of your eldest child? _____

Do you have a physical or learning disability?

Yes ☐ No ☐

Do any of your children have a physical or learning disability?

Yes ☐ No ☐

Do you have any educational qualifications for which you received a certificate?

Yes ☐ No ☐

Do you have any professional, vocational or other work-related qualifications for which you received a certificate?

Yes ☐ No ☐

If you answered 'Yes' to either of the above questions please indicate below what your highest qualification is (If you answered 'No' you do not need to answer this question):

1. At degree level or above Yes ☐

2. Another kind of qualification Yes ☐

Appendix 8: Ethical approval from the Clinical Psychology Research Ethics panel



SCHOOL of HEALTH IN SOCIAL SCIENCE
CLINICAL PSYCHOLOGY

The University of Edinburgh
Medical School
Doorway 6, Teviot Place
Edinburgh EH8 9AG

Telephone 0131 651 3969
Fax 0131 650 3891
Email submitting.ethics@ed.ac.uk

Mary Hughes
21 Overdale Street
Langside
Glasgow
G42 9PZ

10 April 2013

Dear Mary,

Application for Level 2/3 Approval

Re: Do early maladaptive schema domains mediate the relationship between childhood experiences of emotional abuse/neglect and maternal attributions of low perceived controllability in failed child care-giving interactions?

Thank you for submitting the above research project for review by the Section of Clinical Psychology Ethics Research Panel. I can confirm that the submission has been independently reviewed and was approved on the 8th April 2013.

Should there be any change to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Secretary
Clinical Psychology

Appendix 9: Confirmation of approval in relation to project amendment



SCHOOL of HEALTH IN SOCIAL SCIENCE
CLINICAL PSYCHOLOGY

The University of Edinburgh
Medical School
Doorway 6, Teviot Place
Edinburgh EH8 9AG

Telephone 0131 651 3969
Fax 0131 650 3891
Email submitting.ethics@ed.ac.uk

Mary Hughes
Trainee Clinical Psychologist

16 April 2014

Dear Mary,

Level 2/3 Approval – Amendment Request 13th June 2013

Re: Do early maladaptive schema domains mediate the relationship between childhood experiences of emotional abuse/neglect and maternal attributions of low perceived controlability in failed child care-giving interactions?

I can confirm that the amendment request submitted for the above research project has been independently reviewed by a member of the Section of Clinical Psychology Ethics Research Panel and was approved on the 12th June 2013.

Should there be any further changes to the research protocol it is important that you alert us to this as this may necessitate further review.

Yours sincerely,

Kirsty Gardner
Secretary
Clinical Psychology

Appendix 10: Confirmation of approval, Renfrewshire Council

Your Ref:
My Ref: TMcE/LC
Contact: Tony McEwan
Tel: 0141 618 7198
Fax: 0141 618 4874
E-mail: tony.mcewan-els@renfrewshire.gov.uk
Date: 28 August 2013



E-mail: maryhughes2@nhs.net

Dear Ms Hughes

Research request: Do early maladaptive schema domains mediate the relationship between childhood experiences of emotional abuse/neglect and maternal attributions of low perceived controllability in failed child care-giving interactions?

Thank you for your application in relation to the above.

I am pleased to give you consent to approach Renfrewshire schools to participate in your research. However, please note that while I can grant permission to approach our schools, they are under no obligation to participate.

I should be grateful if you could provide me with a copy of your findings when they have been finalised.

Yours sincerely



Tony McEwan
Education Manager (planning and performance)

Director of Education and Leisure: Robert Naylor
Council Headquarters, Renfrewshire House, Cotton Street, Paisley PA1 1LE



Appendix 11: Confirmation of approval, Stirling Council

Mary Hughes
Department of Psychological Services and Research, Cree West,
Belinda Greer
Crichton Hall,
Dumfries,
DG1 4TG

Education

Head of Education:

Tel:

Fax:

Email:

Date: 10 June 2013

Dear Mary

Request for Research

Thank you for completing the pro-forma regarding research which you intend to carry out within Stirling Council Primary schools.

I have signed the pro-forma which is attached.

Final approval should be sought from individual headteachers.

I note your comments on Enhanced Disclosure Scotland/PVG certificate details which you have provided.

Yours sincerely



Belinda Greer
Head of Education

Appendix 12: Confirmation of approval, East Dunbartonshire Council

[EMAIL ROUTED SECURELY VIA GSX] RE: University of Edinburgh & NHS D&G Research recruitment request

Don Ledingham [Don.Ledingham@midlothian.gsx.gov.uk]

You replied on 12/11/2012 17:11.

Sent: 12 November 2012 16:52

To: [Hughes Mary \(NHS DUMFRIES & GALLOWAY\)](#)

[Mary Smith \[Mary.Smith@midlothian.gsx.gov.uk\]](#); [Sheena Dawe](#)

Cc: [\[Sheena.Dawe@midlothian.gsx.gov.uk\]](#)

Mary

Thanks for the clarification. I am happy that you approach the schools.

Regards
Gordon

Gordon Currie
Head of Education

East Dunbartonshire Council
12 Strathkelvin Place
Kirkintilloch
G66 1TJ

Tel: 0141 578 8709
Email: gordon.currie@eastdunbarton.gov.uk

Appendix 13: Confirmation of approval, East Renfrewshire Council

Research Study

Wilson, John [John.Wilson@eastrenfrewshire.gov.uk]

Sent: 15 August 2013 09:37

To: [Hughes Mary \(NHS DUMFRIES & GALLOWAY\)](#)

Mary

I refer to your emails requesting permission to access schools in this authority for the purpose of a research study. I am happy to authorise this request. I know that Evelyn Hunter has explained our 'rota' system to you. Therefore, we would hope to allocate two schools to you and Mrs Hunter has approached two of our head teachers. The head teacher at Braidbar Primary School is happy to help and you can now make direct contact with her. As soon as we have heard back from the second school, Mrs Hunter will be in contact with you again.

Kind regards

John Wilson
Director of Education
Education Department

Phone : 0141 577 3404
Fax : 0141 577 3276

Appendix 14: Confirmation of approval, Midlothian Council

[EMAIL ROUTED SECURELY VIA GSX] RE: University of Edinburgh & NHS D&G Research recruitment request

Don Ledingham [Don.Ledingham@midlothian.gsx.gov.uk]

You replied on 12/11/2012 17:11.

Sent: 12 November 2012 16:52

To: [Hughes Mary \(NHS DUMFRIES & GALLOWAY\)](#)

[Mary Smith \[Mary.Smith@midlothian.gsx.gov.uk\]](#); [Sheena Dawe](#)

Cc: [\[Sheena.Dawe@midlothian.gsx.gov.uk\]](#)

Dear Mary

I'm happy to give permission for you to approach our schools but the final decision about whether or not to participate will lie with the Headteacher.

Regards

Don Ledingham

Appendix 15: Author guidelines, Journal of Family Psychology

Journal of Family Psychology

Article Requirements

For general guidelines to style, authors should study articles previously published in the journal.

All manuscripts must include an abstract containing a maximum of 250 words typed on a separate page. After the abstract, please supply up to five keywords or brief phrases.

The manuscript title should be accurate, fully explanatory, and preferably no longer than 12 words. The title should reflect the content and population studied (e.g., "family therapy for depression in children"). If the paper reports a randomized clinical trial, this should be indicated in the title, and the [CONSORT criteria](#) must be used for reporting purposes.

Research manuscripts and review and theoretical manuscripts that provide creative and integrative summaries of an area of work relevant to family psychology should not exceed 30–35 pages, all inclusive (including cover page, abstract, text, references, tables, figures), with margins of at least 1 inch on all sides and a standard font (e.g., Times New Roman) of 12 points (no smaller). The entire paper (text, references, tables, figures, etc.) must be double spaced. References should not exceed 8 pages.

Brief reports are encouraged for innovative work that may be premature for publication as a full research report because of small sample size, novel methodologies, etc. Brief reports also are an appropriate format for replications and for clinical case studies. Authors of brief reports should indicate in the cover letter that the full report is not under consideration for publication elsewhere. Brief reports should be designated as such and should not exceed a total of 20 pages, all inclusive. References should not exceed 8 pages.

Manuscripts exceeding the space requirement will be returned to the author for shortening prior to peer review.

All research involving human participants must describe oversight of the research process by the relevant Institutional Review Boards and should describe consent and assent procedures briefly in the Method section.

It is important to highlight the significance and novel contribution of the work. The translation of research into practice must be evidenced in all manuscripts. Authors should incorporate a meaningful discussion of the clinical and/or policy implications of their work throughout the manuscript, rather than simply providing a separate section for this material.

Masked Review

The *Journal of Family Psychology*[®] uses a masked reviewing system for all submissions. The cover letter should include all authors' names and institutional affiliations. However, in order to permit anonymous review, the first page of text

should omit this information. This cover page should only include the title of the manuscript and the date it is submitted.

Please make every effort to see that the manuscript itself contains no clues to the authors' identities.

Please ensure that the final version for production includes a byline and full author note for typesetting.

Cover Letter

Authors should indicate in their cover letter that the work has not been published previously and is not under consideration for publication elsewhere. The relationship of the submitted manuscript with other publications and/or submissions of the author, if any, should be explained.

The cover letter should include a statement indicating that the manuscript has been seen and reviewed by all authors and that all authors have contributed to it in a meaningful way.

The cover letter must include the full mailing address, telephone, fax, and email address for the corresponding author.

CONSORT Criteria

The *Journal of Family Psychology* requires the use of the CONSORT reporting standards (i.e., a checklist and flow diagram) for randomized clinical trials, consistent with the policy established by the Publications and Communications Board of the American Psychological Association.

CONSORT (Consolidated Standards of Reporting Trials) offers a standard way to improve the quality of such reports and to ensure that readers have the information necessary to evaluate the quality of a clinical trial. Manuscripts that report randomized clinical trials are required to include a flow diagram of the progress through the phases of the trial and a checklist that identifies where in the manuscript the various criteria are addressed. The checklist should be placed in an Appendix of the manuscript for review purposes.

When a study is not fully consistent with the CONSORT statement, the limitations should be acknowledged and discussed in the text of the manuscript. For follow-up studies of previously published clinical trials, authors should submit a flow diagram of the progress through the phases of the trial and follow-up. The above checklist information should be completed to the extent possible, especially for the Results and Discussion sections of the manuscript.

[Visit the CONSORT Statement Web site](#) for more details and resources.

Manuscript Preparation

Prepare manuscripts according to the *Publication Manual of the American Psychological Association* (6th edition). Manuscripts may be copyedited for bias-free language (see Chapter 3 of the *Publication Manual*).

Review APA's [Checklist for Manuscript Submission](#) before submitting your article.

Double-space all copy. Other formatting instructions, as well as instructions on preparing tables, figures, references, metrics, and abstracts, appear in the *Manual*.

Below are additional instructions regarding the preparation of display equations, computer code, and tables.

Display Equations

We strongly encourage you to use MathType (third-party software) or Equation Editor 3.0 (built into pre-2007 versions of Word) to construct your equations, rather than the equation support that is built into Word 2007 and Word 2010. Equations composed with the built-in Word 2007/Word 2010 equation support are converted to low-resolution graphics when they enter the production process and must be rekeyed by the typesetter, which may introduce errors.

To construct your equations with MathType or Equation Editor 3.0:

- Go to the Text section of the Insert tab and select Object.
- Select MathType or Equation Editor 3.0 in the drop-down menu.

If you have an equation that has already been produced using Microsoft Word 2007 or 2010 and you have access to the full version of MathType 6.5 or later, you can convert this equation to MathType by clicking on MathType Insert Equation. Copy the equation from Microsoft Word and paste it into the MathType box. Verify that your equation is correct, click File, and then click Update. Your equation has now been inserted into your Word file as a MathType Equation.

Use Equation Editor 3.0 or MathType only for equations or for formulas that cannot be produced as Word text using the Times or Symbol font.

In Online Supplemental Material

We request that runnable source code be included as supplemental material to the article. For more information, visit [Supplementing Your Article With Online Material](#).

In the Text of the Article

If you would like to include code in the text of your published manuscript, please submit a separate file with your code exactly as you want it to appear, using Courier New font with a type size of 8 points. We will make an image of each segment of code in your article that exceeds 40 characters in length. (Shorter snippets of code that appear in text will be typeset in Courier New and run in with the rest of the text.) If an appendix contains a mix of code and explanatory text, please submit a file that contains the entire appendix, with the code keyed in 8-point Courier New.

Tables

Use Word's Insert Table function when you create tables. Using spaces or tabs in your table will create problems when the table is typeset and may result in errors.

Submitting Supplemental Materials

APA can place supplemental materials online, available via the published article in the PsycARTICLES® database. Please see [Supplementing Your Article With Online Material](#) for more details.

Abstract and Keywords

All manuscripts must include an abstract containing a maximum of 250 words typed on a separate page. After the abstract, please supply up to five keywords or brief phrases.

References

List references in alphabetical order. Each listed reference should be cited in text, and each text citation should be listed in the References section.

Examples of basic reference formats:

- **Journal Article:**
Hughes, G., Desantis, A., & Waszak, F. (2013). Mechanisms of intentional binding and sensory attenuation: The role of temporal prediction, temporal control, identity prediction, and motor prediction. *Psychological Bulletin*, 139, 133–151. <http://dx.doi.org/10.1037/a0028566>
- **Authored Book:**
Rogers, T. T., & McClelland, J. L. (2004). *Semantic cognition: A parallel distributed processing approach*. Cambridge, MA: MIT Press.
- **Chapter in an Edited Book:**
Gill, M. J., & Sypher, B. D. (2009). Workplace incivility and organizational trust. In P. Lutgen-Sandvik & B. D. Sypher (Eds.), *Destructive organizational communication: Processes, consequences, and constructive ways of organizing* (pp. 53–73). New York, NY: Taylor & Francis.

Figures

Graphics files are welcome if supplied as Tiff or EPS files. Multipanel figures (i.e., figures with parts labeled a, b, c, d, etc.) should be assembled into one file.

The minimum line weight for line art is 0.5 point for optimal printing.

For more information about acceptable resolutions, fonts, sizing, and other figure issues, [please see the general guidelines](#).

When possible, please place symbol legends below the figure instead of to the side.

APA offers authors the option to publish their figures online in color without the costs associated with print publication of color figures.

For authors who prefer their figures to be published in color both in print and online, original color figures can be printed in color at the editor's and publisher's discretion provided the author agrees to pay:

- \$900 for one figure
- An additional \$600 for the second figure
- An additional \$450 for each subsequent figure

Permissions

Authors of accepted papers must obtain and provide to the editor on final acceptance all necessary permissions to reproduce in print and electronic form any copyrighted work, including test materials (or portions thereof), photographs, and other graphic images (including those used as stimuli in experiments).

On advice of counsel, APA may decline to publish any image whose copyright status is unknown.

- [Download Permissions Alert Form \(PDF, 13KB\)](#)

Publication Policies

APA policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications.

See also [APA Journals[®] Internet Posting Guidelines](#).

APA requires authors to reveal any possible conflict of interest in the conduct and

reporting of research (e.g., financial interests in a test or procedure, funding by pharmaceutical companies for drug research).

- [Download Disclosure of Interests Form \(PDF, 38KB\)](#)

Authors of accepted manuscripts are required to transfer the copyright to APA.

- For manuscripts **not** funded by the Wellcome Trust or the Research Councils UK

[Publication Rights \(Copyright Transfer\) Form \(PDF, 83KB\)](#)

- For manuscripts funded by the Wellcome Trust or the Research Councils UK

[Wellcome Trust or Research Councils UK Publication Rights Form \(PDF, 34KB\)](#)

Ethical Principles

It is a violation of APA Ethical Principles to publish "as original data, data that have been previously published" (Standard 8.13).

In addition, APA Ethical Principles specify that "after research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release" (Standard 8.14).

APA expects authors to adhere to these standards. Specifically, APA expects authors to have their data available throughout the editorial review process and for at least 5 years after the date of publication.

Authors are required to state in writing that they have complied with APA ethical standards in the treatment of their sample, human or animal, or to describe the details of treatment.

- [Download Certification of Compliance With APA Ethical Principles Form \(PDF, 26KB\)](#)

The APA Ethics Office provides the full [Ethical Principles of Psychologists and Code of Conduct](#) electronically on its website in HTML, PDF, and Word format. You may also request a copy by [emailing](#) or calling the APA Ethics Office (202-336-5930). You may also read "Ethical Principles," December 1992, *American Psychologist*, Vol. 47, pp. 1597–1611